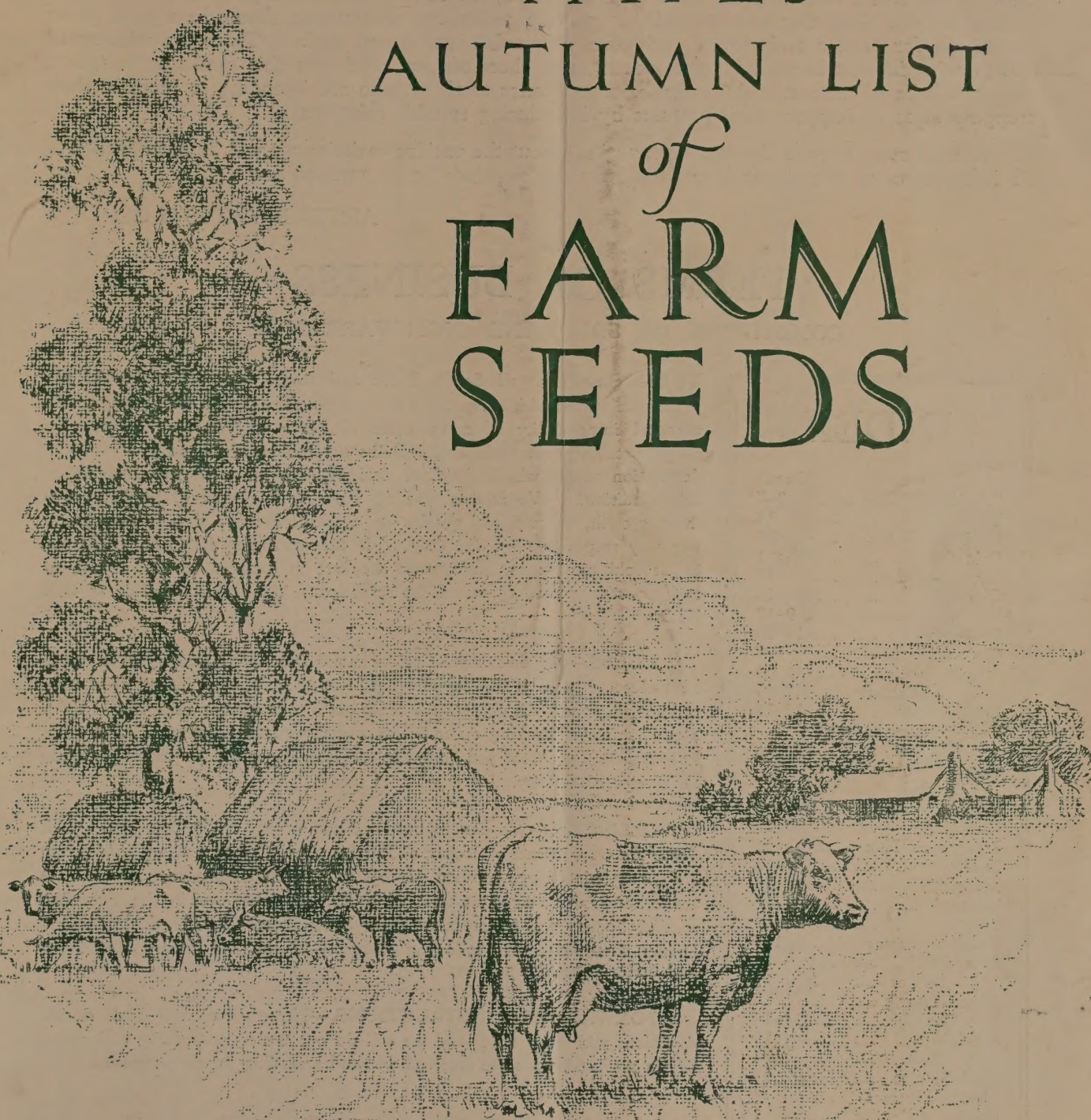


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YATES AUTUMN LIST *of* FARM SEEDS



Season 1929

INTRODUCTION

As this catalogue goes to press, good rains have been experienced through most of eastern New South Wales and in many parts of Queensland, and conditions in other parts of the Commonwealth are not altogether unfavourable, so generally speaking, this autumn should be a good planting season for grasses and clovers and other seasonable agricultural seeds. There is a widespread and growing interest in pasture improvement, and therefore we send you this catalogue confident that it will be of interest and, we hope, of assistance to those who are intending to increase their cropping areas or improve their pastures by introducing suitable mixtures.

If customers require further information about the various varieties, we will be pleased to give all information at our disposal, and suggest suitable kinds or mixtures to sow.

ARTHUR YATES & CO. LTD.

TERMS OF BUSINESS

CONDITIONS OF SALE AND NON-WARRANTY.

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WE believe that all Seeds, Bulbs and Roots sold by us are of the description and kind specified by us at the time of sale, but, owing to the practical impossibility in many cases of being certain of this we give no undertaking that such Seeds, Bulbs or Roots will correspond with the description under which they are sold and we make all sales subject to this condition. We further give no warranty expressed or implied as to their growth, description, quality or productiveness and will not be in any way responsible for the crop. If the purchaser does not accept the goods sold to him on these terms they are at once to be returned to us and any money paid to us will be refunded. **ARTHUR YATES & CO. LTD.**

PRICES.—We do not print prices in this Descriptive Catalogue, as values fluctuate, and some of our supplies have not been received into store at time of going to press. All charges are as set out in our current Price List of Farm Seeds at time of booking order unless specially quoted otherwise. The Price List now current is sent you herewith, and later issues will be posted promptly on receipt of enquiry.

DELIVERY.—We deliver Seeds on rail or wharf, Sydney, after which Seeds are on customer's account and at his risk. Orders sent by goods train are consigned carriage forward (except to unattended platforms), unless we are otherwise instructed at time of order. Delivery within the Suburban area of Sydney will be made of Farm Seeds, Seed Potatoes, Manures, and Garden Sundries, at the following charges:—28 lbs. and under, 9d.; 56 lbs. and under, 1/-; 2/- per cwt.

FORWARDING INSTRUCTIONS.—Please give full and careful directions with each order and we will do our utmost to comply with them. When no instructions are received we send according to our judgment.

Arthur Yates & Co. Ltd.

Suppliers of Re-machined and Tested Farm Seeds

WAREHOUSE:
184-6 SUSSEX STREET
SYDNEY

P.O. BOX 2707 C
G.P.O., SYDNEY

ARTHUR YATES & CO., LTD.

SEED GROWERS, SEED MERCHANTS AND NURSERYMEN.

ADDRESS
LETTERS BOX 2707C G.P.O., SYDNEY

184-186 SUSSEX STREET
SYDNEY, N.S.W.

AUSTRALIA.

REPRESENTED IN
NEW ZEALAND BY

ARTHUR YATES & CO., LTD.
AUCKLAND

PHONES · M 2161 (FOUR LINES)

TELEGRAMS AND CABLES
"SEEDSMAN, SYDNEY."

CODES

A.B.C. 5TH EDITION

A.B.C. 6TH ED. (FIVE LETTER)

ASSOCIATED SEED FARMS &
TRIAL GROUNDS IN N.S.W.
TAS., N.Z. AND ENGLAND

No. 310R issued on
March 1st, 1929

AND IN ENGLAND BY
SAMUEL YATES
75 SHUDEHILL
MANCHESTER
"ESTABLISHED 1826"

CIRCULAR

Conditions of Sale and Non-Warranty.—We believe that all Seeds Bulbs and Roots sold by us are of the description and kind specified by us at the time of sale but owing to the practical impossibility in many cases of being certain of this we give no undertaking that such Seeds Bulbs or Roots will correspond with the description under which they are sold and we make all sales subject to this condition. We further give no warranty expressed or implied as to their growth description quality or productiveness and will not be in any way responsible for the crop. If the purchaser does not accept the goods sold to him on these terms they are at once to be returned to us and any money paid to us will be refunded.

ARTHUR YATES & CO., LTD.

DEAR SIR,

THE 1929 AUTUMN SOWING SEASON

The date of this Price List is a reminder that the important autumn sowing season is now with us, and we send you our Autumn Farm Seed List feeling confident that it will interest and assist you at this season.

The weather conditions in most of the more settled districts of the Commonwealth are ideal for sowing, and we are already receiving a very heavy rush of orders from farmers and graziers who wish to put in additional areas of fodder crops or extend and improve their pastures. All our departments are working at very high pressure to execute orders as promptly as possible, but at a time like this a little delay is sometimes unavoidable, and we ask customers to forward their orders as early as they can so that the goods will be received by them in good time before sowing.

PRICES.—This price list issued on March 1st coincides with the publication of our Autumn Catalogue, and a copy of it is being sent to each farm seed customer on our books, but we would like customers to bear in mind that prices of agricultural seeds are always subject to fluctuation, and therefore we issue this current price list at frequent intervals during the sowing seasons and would ask those who are not ordering straightaway to write for our current price list whenever they are on the market; it will be sent free and by return post.

PASTURE IMPROVEMENT.—Great interest is being taken in this subject, especially in the coastal and table-land districts of New South Wales, also some of the more favoured parts of the slopes. On page seven we set out suggested specifications for certain districts, and we shall be pleased to give any additional information required to those who are in doubt as to the best varieties to sow. When writing, mention the class of soil, rainfall, and the special purpose for which the pasture would be required.

YATES' A.Y. BROADLEAF LUCERNE.—There is likely to be a keen demand this season for the "King of Fodder Crops," and we have supplies of our usual high quality seed for sale at reasonable rates. Those who are tempted to purchase inferior seed in order to save a penny or two per pound are asked to write for a sample of the seed we offer together with our Lucerne Booklet, the latter giving a good deal of useful information on Lucerne generally, and showing something of the great care and trouble we take to ensure having the best of the season's seed.

TERMS.—Our terms for all Agricultural Seeds are strictly nett cash, and orders should be accompanied by remittance for the approximate amount of the order (including freight if the goods are required by coastal steamer or passenger train, or if to be consigned to unattended platforms). When buyers have established an approved account with us, or if satisfactory Sydney business references are given, our terms are nett cash in 30 days from invoice. When remitting, please add exchange to country cheques.

FORWARDING.—Orders sent by goods train are consigned carriage forward (except to unattended platforms) unless we are otherwise instructed at time of order. We deliver seeds on rail or wharf, Sydney, after which goods are on customer's account, and at his risk.

We trust this list will be of interest and that we shall have the pleasure of supplying your requirements.

ARTHUR YATES & CO. LTD.

APPROXIMATE QUANTITIES TO SOW PER ACRE and Weight in lbs. of varieties quoted per Bushel.

FARM SEEDS		Soy Beans, drilled		Buckwheat, 50 lb. bus., broadcast..	
	Sow per acre if used alone		Sow per acre if used alone		Sow per acre if used alone
Danthonia	15 lb.	60 lb. bus. broadcast	1 bus.	" in drills	25 lb.
Mitchell Grass ..	2 to 3 lb.	Velvet Beans, in wide drills	15 lb.	Canary Seed	17 to 20 lb.
Rhodes Grass	4 to 6 lb.	Market Beans, 60 lb. bus...	2 bus.	Linseed	60 lb.
Paspalum Dilitatum	10 lb.	Peanuts	nuts 30 to 40 lb.	Cattle Melon	2 lb.
Paspalum Compressum	5 lb.		shelled seed 10 lb.	Cattle Pumpkin ..	1 to 2 lb.
Couch Grass	10 lb.	Field Peas, 60 lb. bus. ..	2 bus.	Mustard	8 lb.
Tall Oat Grass	20 to 30 lb.	Lupins, 60 lb. bus. ..	2 bus.	Silver Beet	4 lb.
Phalaris Bulbosa ..	6 to 8 lb.	Tares or Vetches, 60 lb. bus.	1 to 2 bus.	Mangolds	5 lb.
Kilkuyu Grass	2500 roots	Horse or Tick Beans, 60 lb. bus.	2 bus.	Sugar Beet	8 lb.
Cocksfoot, 20 lb. bushel	1 1/2 bus.	Maize, in rows for grain ..	8 to 12 lbs.	Field Carrot	8 lb.
Prairie Grass, 20 lb. bus.	1 to 2 bus.	Maize 50 lbs. bus. broadcast	1 1/2 to 1 3/4 bus.	Swede Turnips	2 to 3 lb.
Awadale Brome Grass	20 to 30 lb.	Sorghum, Broadcast	20 to 30 lb.	Potatoes	6 to 8 cwt.
Rye Grasses, 20 lb. bus.	1 1/2 to 2 bus.	" in drills	10 lb.		
Mixed Grasses, 20 lb. bus.	1 to 1 1/2 bus.	Grain Sorghum	4 to 6 lb.	MARKET GARDEN CROPS	
Grasses and Clovers, Mixed	25 to 30 lb.	Millet, broadcast	20 lb.	Garden Beans, 60 lb. bus.	2 bus.
Clovers, sown alone ..	8 to 12 lb.	" in drills	10 lb.	Cabbage	1 lb.
" sown with grasses ..	2 to 3 lb.	Sudan Grass	8 to 12 lb.	Cauliflower	1 lb.
Subterranean Clover ..	3 to 4 lb.	Seed Oats, 40 lb. bus. ..	2 bus.	Cucumber	1 lb.
Strawberry Clover ..	from 1 lb.	Seed Wheat, 60 lb. bus., in	1 1/2 to 1 bus.	Melon, Water	2 lb.
Lucerne, moist localities, broadcast	12 to 15 lb.	drills for grain	1 to 2 bus.	" Rock	3 lb.
Lucerne, moist localities drilled ..	8 to 12 lb.	Seed Wheat broadcast ..	2 bus.	Onion	3 lb.
Lucerne, dry districts ..	6 to 10 lb.	Barley 50 lb. bus. ..	2 bus.	Peas, 60 lb. bus. ..	2 bus.
Cow Peas, drilled	10 lb.	Rye Corn, 60 lb. bus. ..	2 bus.	Pumpkin	2 lb.
60 lb. bus. broadcast ..	1 to 1 bus.	Sowing Rape	3 to 6 lb.	Tomatoes	2 oz.
		Sheeps Burnet	10 to 12 lb.	Turnip	2 to 3 lb.
		Sunflower, in rows ..	12 lb.		
		Artichokes	4 to 6 cwt.		

THIS PRICE LIST CANCELS ALL PREVIOUS ISSUES.

CURRENT PRICE LIST

LUCERNE

YATES' A.Y. BROADLEAF GIANT UPRIGHT.—This is the proved best strain for all purposes and Australian conditions. For full information, see Yates' Lucerne Booklet. Supplied only in sealed and branded bags.

YATES'	25 lbs., 2/9 lb.; 50 lbs., 2/8 lb.
	
LUCERNE	
Small lots under 25 lbs. ..	2/10 lb.
25 lbs. and over ..	2/9 lb.
50 lbs. and over ..	2/8 lb.
5 cwt. and over ..	2/7 lb.
10 cwt. and over ..	2/6 lb.

GRASS SEEDS

IMPORTANT PASTURE VARIETIES For AUTUMN and WINTER SOWING.

	100lb. Lots. Per lb. (20 lbs.)	500lb. Lots. Per lb. or Per Bus. (20 lbs.)
Rye Grass—		
„ Perennial, A.Y. Old Pasture (extra heavy) ..	-7	10/- bus. 9/9 bus.
„ Perennial, Re-machined (good ordinary) ..	-5½	7/7 bus. 7/4 bus.
„ Italian ..	-5	7/- bus. 6/10 bus.
„ Westerwoldicum ..	-5	7/3 bus. 7/- bus.
„ Wimmera (from selected pastures) ..	1/1	1/- lb. -11 lb.
Cocksfoot (extra heavy seed) ..	1/1	-11½ lb. -10½ lb.
Phalaris bulbosa (from pastures showing true perennial type) ..	7/- per pound	
„ 14 lbs. and over 6/10 per pound		
„ 50 lbs. and over 6/8 per pound		
„ 100 lbs. and over 6/6 per pound		
Prairie ..	-9	-8 lb. -7½ lb.
Tall Oat Grass (Avena elatior) ..	1/6	1/4 lb. 1/2 lb.
Danthonia (Wallaby Grass) ..	1/6	1/4 lb.
Fescue—		
„ Tall ..	1/11	1/9½ lb. 1/8 lb.
„ Chewings ..	1/5	1/3 lb. 1/1 lb.
„ Meadow ..	1/6	1/4 lb.
„ Hooker's ..		
„ Fine Leaved (ovina) ..	3/4	3/2 lb.

Stocks exhausted but further supplies expected late March

IMPORTANT PASTURE VARIETIES for SPRING, SUMMER and EARLY AUTUMN PLANTING.

	Per lb.	Per 100.	Per 1000
Rhodes ..	1/7	1/6 lb.	1/5 lb.
Paspalum			
„ Dilatum (Prime hand-shaken) ..	2/-	1/11 lb.	1/10 lb.
„ Compressum ..	1/-	-9 lb.	-7 lb.
Couch (cynodon dactylon) (choice local saved) ..	1/9	1/8 lb.	1/6 lb.
Teff Grass ..	-9	-7 lb.	
GRASSES SUPPLIED BY ROOTS ONLY			
Kikuyu ..	7/6	52/6	75/-
Elephant Grass ..	10/-		
Poa Aquatica (Water Meadow Grass), per sack, 35/-; ½ sack, 18/6			
Poa Fluitans ..	per sack, 40/-; ½ sack, 22/6		
Paspalum distichum ..	per sack, 35/-; ½ sack, 18/6		

We can give special quotations for Victorian orders.

NATIVE VARIETIES

(Supplies Very Irregular)	Per lb.
Mitchell (Astrebla) ..	
Australian Blue (Andropogon) ..	
Flinders Grass ..	
Coolah Grass ..	
Native Millet ..	

SUNDRY GRASSES and SPECIAL LAWN MIXTURES.

Poa	Per lb.	28 lbs. Per lb.	100 lbs. Per lb.
„ pratensis (Kentucky Blue Grass)	2/3	2/1	1/11½
„ compressa (Canadian Blue Grass)			
„ trivialis (Rough-stalked Meadow Grass) ..	2/3		
„ nemoralis (Wood Meadow Grass)	2/9		
Agrostis (The Bent Grasses) ..			
„ tenuis canina (Brown Top or Rhode Island Bent) (specially cleaned for lawns) ..	3/-	2/9	2/8
„ vulgaris (Red Top) ..	2/6	2/4	
„ stolonifera (Creeping Bent or Fiorin) ..			

SUNDRY GRASSES and SPECIAL LAWN MIXTURES—Continued.

	Per lb.	28 lbs. Per lb.	100 lbs. Per lb.
Crested Dogtail ..	1/4	1/3	1/1
Timothy ..	-11	-10	-8
Yorkshire Fog ..	1/-		
No. 1 Mixture, "Yates' Evergreen" for lawns. (The finest, dwarfest and most permanent grasses) ..	3/-	2/11	2/9
No. 2 Mixture, for tennis courts ..	3/6	3/3	3/2
No. 3 Mixture, for putting greens ..	3/9	3/6	3/3
No. 4 Mixture, for fairways ..	2/-	1/11	1/9
No. 5 Mixture, for bowling greens and croquet lawns ..	4/-	3/9	3/8
No. 6 Mixture for Lawns. A cheaper mixture of hardy and quick growing Grasses. ..	1/9	1/8	1/6
Lawn Couch, super grade ..	3/-	2/10	2/9
Couch Grass Roots ..	per sugar bag, 5/-	per sack, 12/6	
Buffalo, roots only ..	per 100 2/6	per 1,000 17/6	
Kikuyu (sometimes used for lawns), See Pasture Grasses Section.			

WHEN ORDERING LAWN MIXTURES, GIVE PARTICULARS OF SOIL, LOCATION AND WATER SUPPLY.

CLOVER SEEDS

	Per lb.	28 lbs. Per lb.	100 lbs. Per lb.
Subterranean ..	3/2	3/-	2/11
White (Superfine Grade) ..	1/6	1/5	1/4
Perennial Red or Cow Grass ..	1/3	1/2	1/1
Alsike ..	2/-	1/11	1/9
Strawberry (shelled seed) ..	8/9	8/3	
„ „ 14 lbs. & over	8/6		
Lotus			
„ major ..	2/7	2/4	
„ „ 14 lbs. and over ..	2/6		
„ corniculatus ..	2/3	2/1	
„ „ 14 lbs. and over ..	2/2		
„ angustissimus ..	2/1	1/11	
„ „ 14 lbs. and over ..	2/-		
Medicago			
„ lupulina (English Yellow Trefoil) ..	1/3	1/2	1/-
„ orbicularis (Burrless Clover) ..	2/3		
„ denticulata (Burr or Native Trefoil) (shelled seed) ..	1/2	1/1	1/-
Berseem (Egyptian Clover) ..	1/3	1/2	1/1
Incarnatum (Crimson Clover) ..	1/1	1/-	1/11
Bokhara (White Sweet Clover) ..	1/2	1/1	1/-
Cluster Clover (Trifolium Glomeratum) Selected Seed ..	2/6	2/4	
Sainfoin (no supplies) ..			

SUNDRY PASTURE PLANTS

	Per lb.	28 lbs. Per lb.	100 lbs. Per lb.
Sheep's Burnet ..	1/4	1/3	1/1
Rib Grass ..	-9	-8	-7
Salt Bush, Old Man (Nummularia) ..	5/3		
„ 14 lbs. and over ..	5/-		
Salt Bush, Creeping (Semibaccata) ..	6/6		
„ 14 lbs. and over ..	6/3		

MILLET

	Per lb.	56 lbs. & over Per Cwt.	100 lbs. & over Per cwt.
Japanese ..	-3	18/-	17/-
Hungarian ..	-3½	25/-	24/-
White French ..	-4	26/-	24/-
Pearl ..			
Broom (Local Grown Long Hurl) ..	-5	32/6	

The Prices quoted herein are those ruling at the date on the front page hereof.

This Price List is published at short intervals, and there is always one current, write us for it when interested.

Lines not priced are not at present in stock, but supplies may be available a little later—watch following issues.

CURRENT PRICE LIST

SUDAN GRASS

Locally grown seed, remachined in our own cleaning plant and passed by the Dept. of Agriculture as free from all injurious Sorghum Hybrids. } New supplies now available 9d. per lb.; 56 lbs. and over 70/- per cwt., 10 cwt. and over 67/6 per cwt.

SEED MAIZE

Varieties marked "to arrive" are quoted subject to the safe arrival at due time and in good order of supplies arranged for or in transit. 10 Bus. Per ¼ Bus. Per Bus. Per Bus.

Early Morn	..	..	..
Golden Glow	..	..	..
90 Day Flint	..	..	..
Small Leaming	..	..	..
Silvermine	..	..	..
Small Early Red Hogan	..	..	..
Funk's Early Yellow Dent	..	..	..
Wellingrove (or Early Yellow Dent)	..	..	..
Fitzroy (or Improved Yellow Dent)	..	..	..
Hickory King	..	..	..
„ Selected for Seed Sample	..	..	..
„ Regraded for Green Fodder	..	..	..
Giant White	..	..	..
Goldmine	..	..	..
Manning White	..	..	..
Large Red Hogan	..	..	..
Yellow Hogan	..	..	..
Yellow Hawkesbury	..	..	..
Yellow Moruya	..	..	..

SEED OATS

	Per Bus.	25 bus. Per Bus.
Algerian, A.Y. Extra Prime	6/3	6/-
„ Good Regraded	5/9	5/6
Sunrise (rust resistant, moderate stooling)	Contract Grown 8/3	8/-
Mulga (early, grazes well)	8/3	8/-
Myall (early, fine grain yielder)	8/1	7/10
Buddah (very early, rust resistant)	..	..
Guyra (for cool districts)	7/3	7/-
Yarran (for wheat districts, strong straw)	..	..
Warrigal (excellent grain variety)	7/6	7/3
Ruakura	6/9	—
Lachlan (good grain variety for inland)	..	..
White Tartarian	7/6	7/3
Black Tartarian	7/3	7/-
Heavy White	7/3	7/-
Heavy Black	6/2	..
Dun	8/8	..

SEED WHEAT

Florence (excellent for grazing on coast, and for grain in very early districts; a hard wheat) ..	8/6	8/3
Thew (a hard wheat, also excellent for grazing on coast)	8/8	8/5
Firbank (an early grazing wheat)	..	..
Turvey	..	..
Canberra	8/6	8/3
Hard Federation	8/6	8/3
Waratah	8/6	8/3
Soft Federation	8/6	8/3
Marshall's No. 3 (a purple straw variety)	8/6	8/3
Yandilla King	8/6	8/3
Cleveland	—	—
Bena	8/6	8/3

SEED BARLEY

Skinless	8/11	8/8
Trabut (a six-row variety, similar to Cape, but usually earlier)	9/4	9/1
Pryor (a two-row barley, stools abundantly)	9/4	9/1
Cape	6/6	6/3
English	7/1	6/10

RYE CORN

Mammoth White	9/2	8/11
Black Winter (no supplies this season)	..	..

SORGHUM

SWEET VARIETIES.	Per lb.	56lbs. & over Per cwt.	10 cwt. and over Per cwt.
No 34 (no supplies)	—	—	—
Early Amber Cane	-/5	38/6	37/-
Sumac	-/7	56/-	—
Planters' Friend	-/4½	36/-	35/-
Saccharine	—	—	—
Collier	-/7	54/-	—
Honey	—	—	—
No. 61 (now called "Cowper")	—	—	—
White African	-/7	54/-	—
Saccharatum or Black Sorghum (reliable supplies not offering)	—	—	—
GRAIN VARIETIES.			
Manchu Kaoliang	..	..	..
White Yolo	..	..	..
Feterita	-/4½	36/-	35/6
Milo	..	..	..
Kaffir	..	..	..

SOWING RAPE

	Per lb.	56lbs. & over Per cwt.	10 cwt. and over Per cwt.
A.Y. Dwarf Broadleaf Essex	-/7	57/6	54/-

FIELD PEA AND BEAN CROPS

	Per lb.	Per Bus. (60 lbs.)	10 Bus. Per Bus.
Field Peas	..	..	..
„ Grey or Partridge	-/3	10/9	10/6
„ Blue	-/3½	13/3	13/-
„ Dun	-/3½	13/6	13/3
Cow Peas	..	..	..
„ Black Seeded	..	..	..
„ Clay Coloured	..	..	..
Soy Beans, Wilson's Early Black, Mammoth Yellow, Tarheel Black,	..	..	..
Velvet Bean, 90 Day Speckled,	..	..	..
Osceola	—	—	—
Horse or Tick Beans	-/3½	13/3	13/-
Mauritius Beans	..	..	..

TARES OR VETCHES

	Per lb.	Per Bus (60 lbs.)	10 Bus. Per Bus.
Golden	-/7	26/6	26/-
Grey or Black	..	..	..

MANGOLDS AND SUGAR BEET

	Per lb.	28lbs. & over. Per lb.	56lbs. & over Per cwt.
Mangold, Yates' Mammoth Long Red, Yates' Champion Yellow Globe, Golden Tankard, Long Yellow, Giant Half Sugar White, Giant Half Sugar Rose	1/6	1/4	120/-
Sugar Beet, Wanzleben	2/-	1/9	170/-

SHALLOTS AND TREE AND POTATO

ONIONS	28 lbs. and over	Per Cwt.
Shallots, Small French. Limited Supplies	11d lb.	87/6 1/- lb
Potato Onions	..	..
Tree Onion Tops	..	.. lb.
Garlic, 28 lbs. and over, 1/1 lb.; 56 lbs. and over, 100/- cwt.	..	1/3 lb.

JERUSALEM ARTICHOKEs

(Tubers only). An excellent vegetable and valuable for pig food. Supplies now exhausted 7lbs. 14lbs. 28lbs. 56lbs. cwt.

SWEDE TURNIPS

also Field Turnips and Field Carrots are now priced in Yates' Current Price List of Vegetables

SUNDRY FODDER and GRAZING CROPS

	Per lb.	28 lbs.	56lbs. & over
Buckwheat, Japanese	-/5	-/4	25/-
Canary Seed (for sowing)	-/8	-/6	50/-
„ Large Moroccan Type (for sowing)	-/10	-/9	72/6
Kale, Thousand Headed	2/6	1/9	165/-
„ Chou Moellier	3/6	3/-	
Kudzu Vine Per Packet, 6d.			
Linseed (Flax)	-/6	-/5	
Lupin, Annual Blue	-/7	-/6	45/-
Melons, Mixed Cattle	3/-	2/9	
Mustard, Agricultural	1/2	-/11	85/-
Peanuts			
„ Small Red Spanish	1/3	1/2	112/-
„ Small White Spanish	1/3	1/2	112/-
Field Pumpkin			
„ Mammoth Cattle	7/6		
„ Gramma or Trombone	10/-		
„ Mixed Cattle	4/6		
Sunflower, Black Seeded	1/3	1/-	92/6
„ Striped Seeded			
Kurrajong (Sterculia diversifolia)			
per oz., 2/-			
Tagosaste (so-called Tree Lucerne),			
per 1/2 lb., 1/9	5/-		
Medicago Arborea (Yellow			
Flowered True Tree Lucerne)			
per oz., 1/- 1/2 lb. 2/6	7/6		

SEED POTATOES

Prices subject to fluctuation. For firm price write for Special Potato Price List in which varieties are illustrated and fully described.

YATES' HAND-PICKED SAMPLES.

	56lbs.	10 cwt.
	& over	& over
	7 lbs.	14lbs. 28lbs. Per cwt. Per cwt.
Duke of York	-	-
Early Puritan	-	-
Epicure	-	-
Sharpe's Express	-	-
Eclipse	-	-

SEED POTATOES—continued.

	7lbs.	14lbs.	28lbs.	56lbs.	10 cwt.
					& over
Early Manistee	..	..	..	..	..
Early Rose	..	..	..	..	..
Early Vermont	..	..	..	..	..
Early Manhattan	..	..	..	..	..
Carmen	..	..	..	..	..
Satisfaction	..	..	..	..	..
Adirondack	..	..	..	..	..
Brownell's Beauty	..	..	..	..	..
Tasmanian Brownells	..	..	..	..	..
Factor	..	..	..	..	..
Up-to-Date	..	..	..	..	..

MARKET BEANS

	1 bus.—60 lbs.	Per lb. in lots of	Per 1/4 bus.	Per Bus. in lots of
		11lb. 31lb. 71lb. 101lb.	1 bus. 1 bus. 5 bus.	
French or Kidney Beans—				
Canadian Wonder, Yates' Selected ..	1/9	1/8	1/7	1/4 16/3 59/- 56/6
Broad Beans—				
Early Long Pod	1/3	1/1	11d	9d 7/6 27/6 26/-
Broad Windsor	1/3	1/1	11d	9d 7/6 27/6 26/-

MARKET PEAS

	1 bus.—60 lbs	Per lb. in lots of	Per 1/4 bus.	Per Bus. in lots of
		11lb. 31lb. 71lb. 101lb.	1 bus. 1 bus. 25 bus. 100 bus.	
New Zealand Grown—				
Greenfeast	1/-	10d	8d	7d 6/6 24/- 23/- 21/-
Witham Wonder	1/-	10d	8d	7d 6/- 22/- 21/- 20/-
Richard Seddon	1/-	10d	8d	7d 7/6 27/- 26/- 24/6
English Wonder				
(Amer. Wonder Impvd.) ..	1/-	10d	8d	7d 7/- 26/- 25/- 23/6
English Defiance	1/-	10d	8d	7d 6/- 22/- 21/- 19/6
Yorkshire Hero	1/-	10d	8d	7d 5/3 19/- 17/6 16/6

N.B.—For full price list of Peas and Beans and all other market garden vegetables ask for Yates' Current Prices of Vegetable Seeds for Market Gardeners.

BIRD SEEDS AND SUPPLIES

WE do what is probably the largest Bird Seed business in Sydney, and, having exceptionally complete facilities for buying and re-grading, we submit the following quotations, in full confidence that our prices are right and our quality unequalled. The seed is all heavily cleaned and freed from dust and other impurities.

YATES' TOP-NOTE MIXTURE for Canaries, Finches, and other small birds, is made up in scientific proportions, and contains all seed necessary to keep cage birds in robust health. Furthermore, we vary the proportions to suit the requirements of birds at the different seasons of the year.

YATES' PARROT FOOD for Parrots, Cockatoos, Parrakeets, etc., is made up from selected seed and grains, such as Maize, Sunflower, Wheat, Oats, Hemp, Peanuts, etc. and is mixed in the proper proportions to keep this class of birds in perfect health and plumage. This mixture ensures a varied diet such as the birds get in their wild state.

	Per lb.	Per 7 lbs.	Per 14 lbs.	Per 28 lbs.	56 lbs. & over	5 cwt.	10 cwt.
					Per cwt.	Per cwt.	Per cwt.
Yates' "Top-Note" Mixture.							
„ In 2 lb. branded cotton bags :							
10d. bag, 9/3 doz. (carriage extra)							
„ In Bulk	-/5	2/9	5/-	9/-	32/-		
Yates' Parrot Food Mixture							
„ In 2 lb. branded cotton bags, 8d. bag ; 7/9 dozen (Carriage extra)							
„ In bulk	-/4	2/-	3/6	6/-	22/6		
Canary							
„ Giant Spanish	-/10	5/3	10/-	19/-	75/-		
„ Morocco	-/9	5/-	9/6	18/-	70/-		
Yates' "Reliable" Plain Canary							
„ In 2 lb. branded cotton bags, 1/- bag ; 11/6 dozen (Carriage extra)							
„ In bulk	-/6	3/-	5/6	9/9	36/-		
Hemp	-/6	3/-	5/6	10/-	37/6		
Bird Millets							
„ White	-/4	2/-	3/6	6/-	22/-		
„ Red	-/4	1/9	3/3	5/6	19/6		
„ Hungarian	-/4	2/-	3/6	6/-	22/6		
„ Japanese	-/3	1/6	2/6	4/9	17/6		
Bird Rape							
„ English, Large	-/7	3/9	7/-	13/6	52/6		
„ Summer (True Small Seeded) ..	-/9	5/-	9/6	17/6			
Sunflower							
„ Black	-/7	3/3	6/-	11/-	41/-		
„ Grey (Large)	-/7	3/3	6/-	10/9	40/-		
„ Striped Imported	-/6	3/-	5/6	9/9	36/-		
Peanuts							
„ Small	-/10	5/6	10/6	20/-	77/6		
Linseed	-/6	3/-	5/-	9/6	36/-		
Bird Lettuce, 3 lbs. for 5/6	2/-						
Maw .. 3 lbs. for 4/6	1/9						
Gold of Pleasure 3 lbs. for 5/6	2/-						
Bird Rib	-/6	3/-	5/6	10/-	37/-		
Bird Pumpkin	1/9	10/6	19/6	35/-			
Bird Melon	-/6	3/-	5/6	9/6			
Shell Grit			1/3	1/9	5/-		
„ In 3 lb. branded cotton bags, 6d. bag							

ON APPLICATION

Arthur Yates & Co. Ltd.

184-186 Sussex St., SYDNEY

John Sands Ltd., Sydney.

Sowing Calendar

Approximate Times for Sowing are denoted by—

† for moderately warm climates where Oranges thrive.

* for cool climates, say where English Fruits thrive.

The most suitable times for sowing are very largely influenced by local conditions and seasons, and these and any local experience available should always be taken into consideration.

Farm Seeds	Jan.	Feb.	Mch.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Farm Seeds	Jan.	Feb.	Mch.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Artichoke, Jerusalem	..	..	..	..	..	..	..	..	..	..	..	..	Peas, for Garden	..	†	†	†	†	†	†	†	†	†	†	†
Barley, English	..	†	†	†	†	†	†	†	†	†	†	†	" " Market	..	†	†	†	†	†	†	†	†	†	†	†
Barley (other varieties)	..	†	†	†	†	†	†	†	†	†	†	†	Pumpkin	..	..	..	..	..	..	..	..	..	..	..	..
Beet, Sugar	..	..	..	..	..	..	..	..	..	..	..	..	Potatoes	..	..	..	..	..	..	..	..	..	..	..	..
Beet, Silver (Field)	..	..	..	..	..	..	..	..	..	..	..	..	Rape	..	..	..	..	..	..	..	..	..	..	..	..
Buckwheat	..	..	..	..	..	..	..	..	..	..	..	..	Rye Corn	..	..	..	..	..	..	..	..	..	..	..	..
Canary	..	..	..	..	..	..	..	..	..	..	..	..	Rhodes Grass	..	..	..	..	..	..	..	..	..	..	..	..
Carrot (Field)	..	..	..	..	..	..	..	..	..	..	..	..	Sainfoin	..	..	..	..	..	..	..	..	..	..	..	..
Cabbage (Cattle)	..	..	..	..	..	..	..	..	..	..	..	..	Saltbush	..	..	..	..	..	..	..	..	..	..	..	..
Chicory	..	..	..	..	..	..	..	..	..	..	..	..	Shallots	..	..	..	..	..	..	..	..	..	..	..	..
Clover (Sorts)	..	..	..	..	..	..	..	..	..	..	..	..	Sheeps Burnet	..	..	..	..	..	..	..	..	..	..	..	..
Couch Grass	..	..	..	..	..	..	..	..	..	..	..	..	Sorghums & Millets:	..	..	..	..	..	..	..	..	..	..	..	..
Cow Pea	..	..	..	..	..	..	..	..	..	..	..	..	Saccharatum	..	..	..	..	..	..	..	..	..	..	..	..
Grasses, Pasture	..	..	..	..	..	..	..	..	..	..	..	..	Sacaline	..	..	..	..	..	..	..	..	..	..	..	..
Kale, Thousand Headed	..	..	..	..	..	..	..	..	..	..	..	..	Planters' Friend	..	..	..	..	..	..	..	..	..	..	..	..
Kale, Chou Moellier	..	..	..	..	..	..	..	..	..	..	..	..	Early Amber Cane	..	..	..	..	..	..	..	..	..	..	..	..
Linseed (Flax)	..	..	..	..	..	..	..	..	..	..	..	..	Millet, Fodder V'ties	..	..	..	..	..	..	..	..	..	..	..	..
Lucerne	..	..	..	..	..	..	..	..	..	..	..	..	Millet, Broom	..	..	..	..	..	..	..	..	..	..	..	..
Lupins	..	..	..	..	..	..	..	..	..	..	..	..	Grain Sorghums	..	..	..	..	..	..	..	..	..	..	..	..
Maize, for Grain	..	..	..	..	..	..	..	..	..	..	..	..	Soy Beans	..	..	..	..	..	..	..	..	..	..	..	..
Maize, for Fodder	..	..	..	..	..	..	..	..	..	..	..	..	Sudan Grass	..	..	..	..	..	..	..	..	..	..	..	..
Mangel	..	..	..	..	..	..	..	..	..	..	..	..	Sunflower	..	..	..	..	..	..	..	..	..	..	..	..
Mangel, Half Sugar	..	..	..	..	..	..	..	..	..	..	..	..	Swede	..	..	..	..	..	..	..	..	..	..	..	..
Millet (See Sorghum)	..	..	..	..	..	..	..	..	..	..	..	..	Tagosaste	..	..	..	..	..	..	..	..	..	..	..	..
Mustard	..	..	..	..	..	..	..	..	..	..	..	..	Tares	..	..	..	..	..	..	..	..	..	..	..	..
Melon, Cattle	..	..	..	..	..	..	..	..	..	..	..	..	Tobacco	..	..	..	..	..	..	..	..	..	..	..	..
Oats, for Fodder	..	..	..	..	..	..	..	..	..	..	..	..	Turnip (Field)	..	..	..	..	..	..	..	..	..	..	..	..
Oats, for Grain & Hay	..	..	..	..	..	..	..	..	..	..	..	..	Velvet Beans	..	..	..	..	..	..	..	..	..	..	..	..
Paspalum	..	..	..	..	..	..	..	..	..	..	..	..	Wallaby Grass	..	..	..	..	..	..	..	..	..	..	..	..
Peanuts	..	..	..	..	..	..	..	..	..	..	..	..	(Danthonia)	..	..	..	..	..	..	..	..	..	..	..	..
Peas, Field, for Fodder	..	..	..	..	..	..	..	..	..	..	..	..	Wheat, for Fodder	..	..	..	..	..	..	..	..	..	..	..	..
" " " Soiling	..	..	..	..	..	..	..	..	..	..	..	..	" " Grain	..	..	..	..	..	..	..	..	..	..	..	..

NATIVE GRASSES

AUSTRALIA'S GREAT HERITAGE

OVER the greater part of our continent climatic conditions are too severe for the successful sowing of introduced grasses. Over that vast area called the Inland Plains the Native Grasses reign supreme because of their amazing hardiness and drought resistance. In addition, our indigenous forage plants are famous for their grazing qualities, in as much as they produce the finest and best wool in the world. The main and most important families of Australian grasses are:—**Panicum** (the Panic Grasses), **Astrebula** (Mitchell Grasses), **Andropogon** (the Blue Grasses), and various **Erianthus** species, which are the dominant types in the summer rainfall region of Northern Australia, and the following:—**Danthonia** (Wallaby Grasses), **Agrostis** (Bent Grasses), **Anthistiria** (Kangaroo Grasses), **Stipa** (the Spear Grasses), **Eragrostis** and **Poa** which predominate in the Southern half, where the main rains fall during the winter.

The purpose of these descriptions is to maintain and if possible increase an interest in native grasses, but it must be understood that supplies are exceedingly irregular. We usually have in stock Wallaby Grass, and at intervals Mitchell Grass and Australian Blue Grass, while of the others mentioned above seed is practically unobtainable. Those interested should write for particulars or varieties available.

For full and interesting information on Native Grasses we would refer readers to Mr. E. Breakwell's book, "The Grasses and Fodder Plants of N.S.W.," which we can supply at 6/- (postage 4d.).

Pasture Grasses

The valuable researches made and experiences gained in the last few years have definitely shown that in practically all the more settled parts of this great continent, the natural pastures can be improved by the introduction of suitable grasses and clovers.

The varieties herein described comprise all those which are suitable for the varying conditions of Australia. While many of them are only useful for coastal, tableland and similar districts, others are proving very useful in the wheat growing and grazing areas. For these latter districts we specially draw your attention to Wimmera Rye Grass, Tall Oat Grass, Tall Fescue, *Phalaris bulbosa*, Cocksfoot and Sheep's Burnet.

For a well-balanced pasture of high feeding value it is essential that it should contain a good proportion of clover and other leguminous growth. In districts of good rainfall the choice is wide, the most valuable varieties being White Clover, Perennial Red Clover, and Subterranean Clover in that order. In the more southerly districts with a winter rainfall Subterranean Clover is proving most successful. In those sections where the rains fall mostly in summer, White Clover, Lucerne, and some of the hardier of the Trefoils are probably the best.

WIMMERA RYE GRASS

(*Lolium Subulatum*)

An annual species of the Rye Grass family which is exceedingly hardy and drought-resistant and is proving of the utmost value to Australian agriculture.

A comparatively new grass, it is being used with great success over a large portion of the wheat area of Southern and South-Western N.S.W., and some parts of Victoria. It has also done well on the tableland and coastal country of N.S.W., and as far west as Trangie and Coonamble. In many ways it is similar to Italian Rye Grass, the main difference being its great drought resistance. It is an annual and will provide green feed for seven to eight months in the colder part of the year, after which, although it dries off, it is very nutritious as dry hay, the seeds remaining attached to the dry straw for a long period. After the first sowing it will seed itself down every year, even though the land be cultivated for crop, and start away again with the first good autumnal rains. In good seasons the grass makes excellent hay of high value, which keeps well and is not readily attacked by mice or other vermin. The seed is free from any burrs or spines, and pastures of this grass are extremely valuable to carry the sheep while the injurious grass seeds are ripening in natural pastures.

We do not recommend sowing this on first-class wheat land which is regularly cropped, as it may interfere with the growth and be a little difficult to control. But on land of lighter type which requires periodical rests from cropping, or on lands which have been completely exhausted by continuous cropping, we confidently recommend it as a pasture grass of the very highest value. On this type of land it should be properly eradicated, before the next wheat crop is sown, by close feeding off before it seeds and working of the fallow to sprout seeds lying in the soil,

which stock will quickly clean up. Sowing alone from six to fifteen pounds per acre should be used according to the district, or, if sown with the crop to provide pasturage on land which it is proposed to spell when the crop is off, as low as four pounds will probably be enough. If more is sown it may interfere with the growth of the crop.

For districts with good winter rainfall a paddock of Wimmera Rye Grass and Subterranean Clover mixed makes an excellent pasture.

It is practically impossible to identify seed of Wimmera Rye Grass in comparison with that of the well known Italian and Perennial Rye Grasses, which are, of course, of much less monetary value and of no use in the hot districts where Wimmera is so successful. Therefore we strongly urge farmers to buy their supplies from a reputable and reliable seed house and not to risk being disappointed with inferior seed.

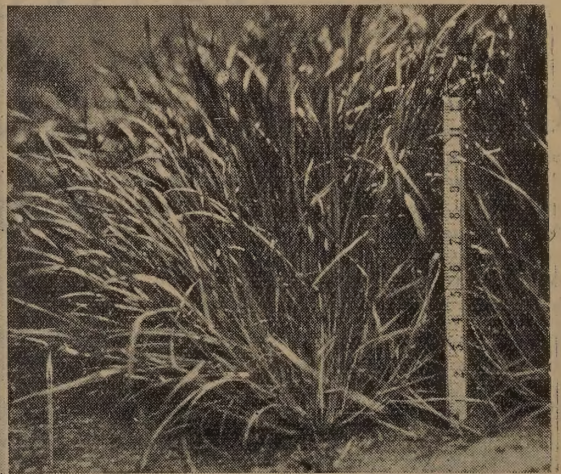
ITALIAN RYE GRASS

(*Lolium Italicum*)

This grass is only a biennial, but if not grazed too closely and is allowed to seed itself (which it does in the second year), it will last for several years. It is excellent practice to include this when sowing down permanent grass mixtures, as it makes quick growth and acts as a cover crop for the slower starting perennial grasses, thus keeping the land free of weeds. It is of great value as a hay crop sown alone; with clovers or with grain, sow up to two bushels per acre.

Yates' Extra Heavy Re-machined Italian.—This is a first-class strain, thoroughly re-cleaned, of the ordinary Italian, and has given excellent results wherever grown.

Western Wolths Italian (*Westerwoldicum*).—A selected strain of Italian Rye Grass, early, hardy and vigorous.



WIMMERA RYE GRASS: LEFT, PORTION OF A Paddock ON A LARGE VICTORIAN SHEEP STATION; RIGHT, UNDER TEST IN OUR TRIAL GROUNDS.

PASTURE GRASSES (Continued)



SHEEP ON THE TABLELANDS PASTURED ON A MIXTURE OF PERENNIAL RYE GRASS AND PERENNIAL RED CLOVER.

Dept. of Agric. Photo.

PHALARIS BULBOSA

Owing to harvesting difficulties, ample supplies of the true *Phalaris Bulbosa* are difficult to obtain and most uncertain, and therefore the cost is necessarily high. As the seed can only be identified by experts, and even then with difficulty, large quantities of that almost useless annual *Phalaris Minor* are sold by unscrupulous and inexperienced people as the true strain. Purchasers, in their own interests, are urged to be most careful of the source and origin of any seed they procure. Although, of course, we cannot give any guarantees, we, in keeping with our reputation, only stock seed from areas we know.

Each year *Phalaris Bulbosa* is required in greater quantity as its merits become better known to farmers and graziers. It is considered by many to be superior to Rye Grass and Cocksfoot for our average Tableland conditions. It has a particular value in its ability to withstand hard, cold conditions; in fact, it makes wonderful growth in the winter months. It is a grass we particularly recommend for the tableland country of N.S.W., and for similar conditions in other States. It is succulent, palatable, and a strong grower. It is deep-rooting, and, when once established, is drought-resistant, and forms a splendid permanent pasture which stands hard grazing. Once thoroughly established, if kept well grazed, it forms a close turf ideal for sheep.

Perhaps nowhere else in the State has such interest been taken in pasture improvements as on the Northern Tablelands north of Armidale, and practically the whole district is unanimous concerning the merits of *Phalaris Bulbosa* as an all-the-year-round pasture grass for their conditions. In grazing trials conducted by the Department of Agriculture at Glen Innes Experiment Farm during four years this wonderful grass has carried two and a quarter sheep per acre continuously and without any spells; and, further, these sheep grew much better and put on more weight than those on the native pasture carrying only one sheep per acre; the latter sheep also had access to stubble and fodder

crop residues. We strongly recommend farmers in all temperate and cold districts to sow, at least, small trial plots of this wonderful grass. It promises excellent results in the grazing lands of our Tasmanian Seed Farm.

This grass also makes good hay if cut as soon as the flower heads are forming. About 5lbs. per acre is a reasonable sowing, and we suggest that about 2lbs. per acre of White Clover or $\frac{1}{2}$ lb. to 1lb. per acre of Subterranean Clover be included either with *Phalaris* alone or with *Phalaris* and other grasses in mixture.

PERENNIAL RYE GRASS (*Lolium Perenne*)

On those parts of our coastal and tableland country, where a high and regular rainfall may be looked for, this is one of the very best of the introduced grasses, and is a specially good winter grass for the dairy farmer. In moist, rich, clay soils it is practically permanent, but best results are obtained in looser soils by re-sowing at intervals of, say, five to ten years. Sow one and a-half to two bushels per acre if used alone. A small proportion should be used in most mixtures for coastal and tableland climates.

Yates' A.Y. Old Pasture Perennial.—This is a very fine perennial variety of the same type and quality as that hitherto offered as Poverty Bay Rye Grass, which was a variety originated by us many years ago. But owing to misrepresentation and substitution in connection with the use of this name we have deemed it advisable to change to the above descriptive name. The seed offered under this brand is saved in a dry climate from true perennial type pastures and therefore more hardy and long lasting under Australian conditions than most of the Perennial Rye Grass generally sold, which is saved in cool wet districts. All the seed we offer is carefully tested, heavily re-machined and is of high percentage of germination and purity.

Yates' Re-machined Perennial.—This is the next best long lasting strain and is superior in this respect and in weight of seed to a great deal of the Rye Grass offered.

PASTURE GRASSES (Continued)

COCKSFOOT

(*Dactylis Glomerata*)

One of the hardiest of the perennial grasses and one of the most useful. It should be included in all grass mixtures sown in the coastal and tableland districts of New South Wales, and in other parts of the Commonwealth with fair average rainfall evenly distributed throughout the year. Being one of the hardiest of the perennial grasses, it is very useful for sowing on hill country and second quality ridges; it also has a large carrying capacity on good soil. It is inclined to grow tussocky, but judicious grazing and occasionally allowing it to seed itself down will counteract this to a certain extent. Two to eight pounds per acre should be included in grass mixtures.

Our seed is heavy and thoroughly machine-cleaned and will give a good germination and a quick and even catch.

SHEEPS BURNET.

This fodder plant has proved itself suitable for our dry inland country, where it would be impossible to succeed with the finer grasses. It is one of our best drought resisting plants, and remains green when every other fodder is burnt up, springing again with light showers that would not have the slightest effect on the grass; it is absolutely permanent, and when once established does not die out. It is a herb, not a grass, grows from 15 to 18 inches high, and has a long tap root, which enables it to stand dry weather and grow when other plants with shallower roots dry off. It grows both in summer and winter, giving the greatest rush of feed in the spring. All animals are fond of it, and thrive well on it, but it is particularly suitable for sheep. It is excellent for sowing on land which is too shallow for Lucerne. Sow ten to twelve pounds per acre. Burnet may, with advantage, be included in Grass Seed Mixtures for poor soils; being a deep rooter it does not rob the surface-rooting grasses, and succeeds where better grasses fail.



A VALUABLE AREA OF TALL OAT GRASS IN THE CROOKWELL DISTRICT.
Dept. of Agric. Photo.



PRAIRIE GRASS IN CONJUNCTION WITH PERENNIAL RYE GRASS, SUBTERRANEAN CLOVER AND RED CLOVER ON BUNGARRIBEE MANOR HORSE STUD FARM.

TALL FESCUE

(*Festuca Elatior*)

A strong growing coarse grass, now considered to be distinctly valuable. While it may not have quite the feeding value of some of the finer grasses, it is extremely hardy, withstands drought well, is adaptable to nearly all classes of soils, and if kept fed down, is quite palatable. It keeps green when other grasses are dried up and thus gives that valuable green pick which helps to keep stock healthy. We would recommend a proportion of this in all mixtures to be sown on any land except low, moist flats. In the wet districts of New Zealand, Tall Fescue takes Ergot very badly which causes sickness and abortion in cattle. This trouble has not occurred in the drier climate of this country, but we would suggest that it should not be sown anywhere near swamps.

TALL OAT GRASS

(*Avena Elatior*)

This grass is now becoming very generally used in pasture mixtures and is proving very hardy and most successful. It has a deep rooting system, which protects it against drought, and it quickly spreads when once established. It is a good winter grass and a quick grower. Stock may at first be averse to it, but when used to it eat it readily, especially if sown in mixture with other grasses. Customers are recommended to try this grass in land which is rather light in character for other artificial grasses, and we would be pleased to have reports after testing.

It withstands heat of summer and the cold of winter, starts very early in spring and continues to give good grazing over a long period. It has been grown successfully in the Department's Trials in Coastal and Tableland district. It is best included in mixture with other grasses at the rate of from one to three pounds per acre.

PASTURE GRASSES (Continued)

PRAIRIE GRASS

(*Bromus Unioloides*)

For rich loamy land with a good rainfall, this is a most valuable grass, particularly for the dairyman. It gives a wonderful growth of succulent palatable fodder. It is essential that Prairie Grass be not constantly grazed, as this will kill it out. When a fair growth has been made it should be stocked heavily, and when fed down spell again until a good new growth has been made. By having paddocks well subdivided this system of grazing can be carried out. It will prove for grazing almost as valuable as a crop of oats, with the advantage that it will last for several years without re-sowing. On soils liable to be tramped very hard and which remain in this set condition it will not respond to this treatment so well. To maintain a good covering it should be allowed to seed itself down at the end of each growing season. It is excellent to use a little in pasture mixtures to give a good body of feed while the Perennial Grasses are establishing themselves. If sown with Lucerne on good land the combination will give wonderful grazing if spelled regularly after being closely grazed. The prairie Grass gives good results in winter when Lucerne is dormant.

Sow twenty to forty pounds per acre if used alone. When used in mixtures, use one to three pounds per acre.

Yates' Finest Bright Re-machined.—A heavy grade plump seed of a very high percentage of germination and purity.

WALLABY GRASSES

(*Danthonia* Species)

One of the hardiest of our native grasses. Grows in a wide variety of soils and climates. Especially adapted to the poorer soils unsuited to other grasses, splendid for sheep.

Mr. F. Turner, in his work, "Australian Grasses," says of this variety:—"It grows both in the coastal districts and in the arid interior; it is one of the most nutritious grasses of Australia, and, unlike most other species of this genus, it will grow more or less all the year round. Stock of all descriptions are remarkably fond of it. The seed germinates readily after showery weather in the autumn and spring months. On good soil the roots of this grass penetrate to a depth which enables the plant when growing in the arid interior to withstand long spells of dry weather." The seed is very light, and a small quantity will cover a good breadth of land; we would strongly recommend that two to three pounds per acre should be added to all mixtures for any soil or climate.

KIKUYU GRASS

(*Pennisetum Clandestinum*)

We undoubtedly have in Kikuyu a grass of which the quality and capabilities are hardly yet realised by farmers and pastoralists. It is a native of British East Africa and is a perennial grass with a strong system of surface and underground runners which quickly root at the joints and then send up fresh growth. On this account it is very quick spreading where the winters are not too severe, and also remarkably drought resistant.

It should succeed and be profitable to grow in almost any district where the rainfall is 20 inches or over. It is of particular value for poor sandy soils where it is usually difficult to grow anything but weeds, though naturally the richer soils will give correspondingly better results.

It does not seed in Australia, therefore, it can only be distributed by means of cuttings or rootlets, which we can supply at any time from late winter on. Plantings are



A MUCH VALUED PADDOCK OF RHODES GRASS ON THE BUNGARIBEE MANOR PROPERTY IN BLACKTOWN DISTRICT, NEAR SYDNEY.

usually made during the spring, summer and early autumn months. It is recommended to plough the land, opening up furrows six feet apart, and dropping in the rootlets every three feet. At this rate about 2500 plants will suffice for one acre.

For prices, see Current Price List.

Approximate cost of Postage and Packing—Per 100, 1s.; per 50, 9d.

KENTUCKY BLUE GRASS

(*Poa Pratensis*)

One of the best winter grasses for tableland districts with a good rainfall, yielding a quantity of fine feed in the autumn, winter and early spring. It dies right down in the summer, but soon springs again after rain. It has a creeping habit, resembling Couch, and, if once introduced, will become a permanency. The celebrated Blue Grass regions of America, so noted for their horses, take their name from this grass, which forms the bulk of the pastures there. As this grass is very delicate, and easily burnt up while in its younger stage, we recommend that it be sown in the early autumn only.

RHODES GRASS

(*Chloris Gayana*)

A very strong growing grass, which, rooting at every joint, soon covers a large area. Excellent for moist situations and hot climates, but succeeds well in a large range of situations and climates, except where heavy frosts are experienced. It is quick germinating after rain, but needs soft moist weather for an ideal "strike." It makes growth rapidly and is very palatable to all stock. When well established it is remarkably drought resistant. It is very largely used for surface sowing after clearing and burning off scrub in the coastal areas, and for this purpose there is nothing better. In some of the inland districts of Queensland Rhodes Grass is proving of the utmost value, and has also been of value in some parts of the Western slopes of N.S.W., especially in areas where summer rains predominate, not only in mixed pastures, but as a special grazing crop when planted with Lucerne, say four pounds of

(Continued overleaf)

PASTURE GRASSES (Continued)

Rhodes and two or three pounds of Lucerne per acre. When sown alone six to ten pounds per acre is sufficient, if good quality seed is used.

MEADOW FESCUE

(*Festuca Pratensis*)

An excellent perennial grass for districts with fairly regular rainfall, and much relished by all stock. This grass has given good results under observation in many districts, and should be included in all grass mixtures for districts with good rainfall where long dry spells are unusual.

PASPALUM DILATATUM

(Yates' Prime "Hand Shaken")

Does well for a few years planted in conjunction with Rhodes Grass in coastal districts after a burn. The seed should be sown during spring, summer, or early autumn, say from August to April. Succeeds best where moist warm conditions prevail, but will prove a very profitable crop even where a moderate rainfall is experienced, and under these latter conditions it is not so likely to become rank and difficult to deal with. Once introduced into swampy land Paspalum soon covers it with a thick mat and gives good grazing where the land would otherwise be useless. It is an excellent practice to sow a few pounds of Perennial Red Clover and White Clover with the Paspalum, as these provide feed when the latter is more or less dormant. Sow ten to twelve pounds of Paspalum per acre. Special quotes for large quantities.

PASPALUM COMPRESSUM

(Also known as Dorrington Grass or Carpet Grass)

A dwarf compact growing variety of Paspalum, proving of great value for poor sandy ridgy stretches of country in districts where Paspalum Dilatum does well: makes well matted roots. Sow five pounds per acre.

COUCH GRASS

(*Cynodon Dactylon*)

Stands heat and drought well and is specially suited for dry and sandy spots on the coast, and mild districts of good rainfall where other grasses will not flourish. It is also of great value for binding loose soil, sand banks, etc. It should not be planted near cultivation paddocks, as it is difficult to eradicate. Unless the ground is warm and moist, the germination is often unsatisfactory; therefore, sow in warm weather after good rains, using ten pounds per acre.

In warm climates this grass is very largely used for lawns, making a close, fine turf, and withstanding considerable heat and drought. For this purpose one to two pounds of seed are sufficient for about ten yards square.

ELEPHANT GRASS

(*Pennisetum Purpureum*)

Although not strictly speaking a pasture grass, this recent introduction has proved to be a valuable acquisition and a fodder plant of considerable value. This is a vigorous growing plant, attaining a height of 12 to 15 feet. It stands cutting well, tests made by the Department of Agriculture showing a return of 50 tons and more of green fodder per acre per year, and also that this grass is of good feeding quality and that stock relish it, but it must not be allowed to get too high and coarse. It may be either grazed or cut, and shows a very satisfactory food value by analysis. Milk yield and tests are well maintained.

Elephant grass is a summer grass and gives good results, even if only on poor land. The cuttings should be planted three feet apart in and between the rows.

For prices, see Current Price List. Approximate cost of postage and packing on cuttings—Per 100, 2/9; per 50, 1/9; per 25, 1/3; per 12, 9d.

WATER MEADOW GRASS

(*Poa Aquatica*)



ILLUSTRATION SHOWS WATER MEADOW GRASS GIVING EXCELLENT FEED IN SWAMPY COUNTRY.

This is used rather extensively on marshy land, and swamps in Gippsland. The plant is fairly nutritious, but rather coarse. We can usually supply root stocks. Customers should give us a week or 10 days' notice to enable us to arrange supplies.

CHEWING FESCUE

(*Festuca Rubra* Var.)

This grass has been grown in New Zealand with success on poor, light, as well as heavier lands; it has formed a good sward where no other grass would succeed. It is permanent, and throws up a useful amount of feed in the early spring, particularly good for sheep. We would recommend that a little of this grass be included in all mixtures for permanent pasture in coastal or tableland districts, or, if planted alone, allow fifteen pounds per acre.

FESCUE (Fine Leaved)

(*Festuca Ovina Tenuifolia*)

This grass is not recommended as a pasture grass, but is excellent for lawn purposes, giving a very fine even sward.

AGROSTIS SPECIES

These grasses are used fairly largely for lawns, golf greens, etc., and are commonly known as Bent Grasses. Their value for pasturage is low, except in cold, harsh situations. We stock—*A. canina* (Brown Top or Rhode Island Bent); *A. vulgaris* (Red Top).

TEFF GRASS

(*Eragrostis Abyssinica*)

An annual summer growing grass in very great favour in South Africa, especially where summer rains are prevalent. It must be re-sown every year like Sudan grass, but we regard the latter as much more suited to Australian conditions.

OTHER GRASSES

We also stock the following, which, however, are of minor importance except for special situations or purposes:—Timothy, *Poa trivialis*, *Poa nemoralis*, Meadow Fox Tail, Crested Dog's Tail, Yorkshire Fog, Rib Grass or Lamb's Tongue (not a member of the grass family).

Grass Seed Mixtures

FOR BETTER
PASTURES

THE following table of Grass Seed Mixtures has been drawn up by the Agrostologist of the Agricultural Department of New South Wales as recommended for the different parts of the State. All interested in Pasture Improvement are indebted to the Agrostologist's Branch of the N.S.W. Dept. of Agriculture for the research work carried out by them with Pastures Grasses, and for valuable knowledge afforded by their trials of the behaviour of the different grasses under our N.S.W. conditions.

In their work of distributing information and suggestions as to Pasture Improvements, we are glad to co-operate, and with our long connection with the grass seed business and the information gained from experiences of our customers throughout the country, we are able to make recommendations and offer specifications specially drawn up for customers' particular requirements, or to give advice on their grass seed problems. This table is published as a guide to help those interested to work out a pasture mixture for their particular requirements and should prove valuable not only to land-holders of New South Wales, but to the whole Commonwealth, as these Grass Seed Mixtures should do well anywhere where the climate is somewhat similar to the different parts of New South Wales. We shall always be glad to go into further particulars with any farmer who has any grass seed problems, and to recommend pastures for his own particular conditions. In soils of fair quality or where preparation of the land for sowing has been good, heavier sowings can be made with advantage.

All the following mixtures, except those containing Paspalum and Rhodes Grass, are best sown after the first good autumn rains, and plans should be formed well in advance so that the land can be thoroughly prepared. Please refer to the mixtures by number (viz., "N.C.C. 3" or "S.C. 2"). The quantities given are for one acre.

SOWING GRASS SEED.—Wherever possible, the seed should be sown with the wheat drill, mixing the seed with superphosphate ($\frac{1}{2}$ to 1 cwt. per acre), just prior to sowing. The hoes or discs of the drill should be set to run on the surface of the ground, as the seed only requires to be lightly covered; run a harrow at right angles to the direction of the drilling if the seed has not been well covered by the drill.

Where it is impossible to use implements for sowing and covering, the seed should be broadcasted in and around stump holes, dug-out rabbit burrows, among fallen timber

or any other suitable cover, in which it will be held, and later germinate.

When sowing mixtures of light and heavy seed, only small lots should be mixed at one time, and the seed should be kept well stirred while distributing.

Where very small quantities per acre are being sown, it will be found easier to do so by sowing half the seed first at half the rate per acre thus going over the land twice.

By this means errors made in the first operation may be rectified the second time over.

For NORTH COAST and CENTRAL COAST

N.C.C. 1

12 lbs. Paspalum Dilatatum
4 " White Clover

16 lbs.

N.C.C. 2

5 lbs. Rhodes Grass
2 " Lucerne

7 lbs.

N.C.C. 3

Renovations of Paspalum—
Plough, Harrow, then
sow as under:

2 lbs. Tall Fescue
2 " Italian Ryegrass
2 " Perennial Ryegrass
2 " Wimmera Ryegrass
2 " Cocksfoot
1 " Phalaris
1 " White Clover
1 " Subterranean Clover
1 " Perennial Red Clover
1 " Lucerne
1 " Sheeps Burnet

16 lbs.

N.C.C. 4

Renovation of Paspalum.—
Where unable to plough,
broadcast and harrow
in the following:

3 lbs. Wimmera Ryegrass
2 " Italian Ryegrass
2 " Perennial Ryegrass
2 " Subterranean Clover
1 " White Clover
2 " Sheeps Burnet

12 lbs.

C.C. 5

The following mixture is
suitable for the Central
Coast only:

3 lbs. Phalaris Bulbosa
6 " Perennial Ryegrass
2 " Wimmera Ryegrass
2 " Subterranean Clover
2 " Perennial Red Clover

15 lbs.

N.C.C. 6 (Heath Country) 6 lbs. Paspalum Compressum

For SOUTH COAST S.C. 1

12 lbs. Paspalum Dilatatum
4 " White Clover

16 lbs.

S.C. 2

3 lbs. Phalaris Bulbosa
4 " Wimmera Ryegrass
4 " Tall Oat Grass
2 " Cow Grass, Red Clover
1 " Subterranean Clover
1 " White Clover

15 lbs.

S.C. 3

4 lbs. Cocksfoot
4 " Tall Fescue
8 " Perennial Ryegrass
2 " Perennial Red Clover
1 " Subterranean Clover
1 " White Clover

20 lbs.

For NEW ENGLAND and NORTHERN TABLELAND

N.T. 1 (Black Soil)

4 lbs. Phalaris
2 " Cow Grass, Red Clover

6 lbs.

N.T. 2 (Red Soil)

2 lbs. Tall Oat
4 " Tall Fescue
6 " Cocksfoot
2 " Cow Grass, Red Clover

14 lbs.

N.T. 3 (Black Soil)

2 lbs. Phalaris
10 " Perennial Ryegrass
3 " Cow Grass

15 lbs.

N.T. 4 (Poor Quality Ridges)

2 lbs. Tall Fescue
4 " Wimmera Ryegrass
4 " Cocksfoot
2 " Sheeps Burnet
1 " Subterranean Clover

13 lbs.

N.T. 5

Old Potato Land to be rested
3-4 years:
10 lbs. Perennial Ryegrass
2 " Cow Grass

12 lbs.

For CENTRAL TABLELANDS

C.T. 1

4 lbs. Phalaris Bulbosa
2 " Lucerne

6 lbs.

C.T. 2

6 lbs. Tall Fescue
6 " Cocksfoot
2 " Lucerne

14 lbs.

C.T. 3

2 lbs. Tall Oat Grass
4 " Wimmera Ryegrass
1 " Lucerne
1 " Subterranean Clover

8 lbs.

For SOUTHERN TABLELANDS

S.T. 1

4 lbs. Phalaris Bulbosa
2 " Lucerne

6 lbs.

S.T. 2

6 lbs. Tall Fescue
2 " Cocksfoot
2 " Lucerne

10 lbs.

S.T. 3

2 lbs. Tall Oat Grass
4 " Wimmera Ryegrass
1 " Lucerne
1 " Subterranean Clover

8 lbs.

S.T. 4

6 lbs. Perennial Ryegrass
4 " Cocksfoot
2 " Sheeps Burnet
3 " Cow Grass

15 lbs.

For SLOPES

S. 1

3 lbs. Lucerne
3 " Wimmera Ryegrass

6 lbs.

S. 2

2 lbs. Subterranean Clover
3 " Wimmera Ryegrass

5 lbs.

For PLAINS

SOUTH

P. 1

3 lbs. Lucerne
3 " Wimmera

6 lbs.

NORTH & WEST

P. 2

3 lbs. Wimmera Ryegrass
3 " Lucerne

6 lbs.

P. 3

Where Lucerne will not thrive
6 lbs. Wimmera

P. 4

Save and sow Seed of best
Native Grasses

Will It Grow Lucerne?

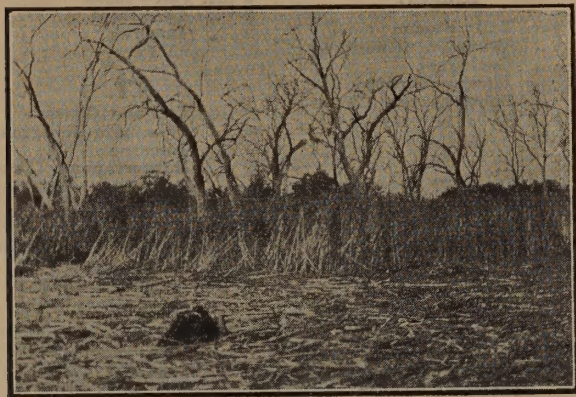
It is seldom safe for a farmer to say that lucerne will not grow profitably on his land before he has tried it. It is usually associated with rich alluvial soils, but while the best results are obtained from such land, it also thrives on a wide range of soils that do not possess the depth or fertility of the rich alluvials. It is sensitive in certain respects, and disregard of its special susceptibilities will result in reduced yields, but payable results may be expected from almost any land, except that which is badly drained or is very sandy. The plant roots very deeply, and it is obvious that a deep, permeable subsoil contributes to maximum results; but this is not an absolute essential to successful growth, as is proved by the results obtained on soil that at one time would have been considered quite unsuitable.

LUCERNE ON THE COAST

Green Fodder for Milking Cows

"Although lucerne is fairly extensively grown in coastal districts, dairy farmers should endeavour to grow larger areas, as this crop is undoubtedly the most satisfactory hay, green fodder, and grazing proposition available. Once established it lasts for a number of years, and although the initial expenditure for seed and preparation of the land is somewhat high, the value of the feed produced during the first two years of the crop's growth more than covers these costs. Lucerne as green feed or hay is excellent fodder for dairy stock. Being a legume, it is rich in protein, an ingredient that is required in large quantities by milking cows in high production. On most dairy farms there is often a shortage of succulent green feed during winter months, and cows respond

well if judiciously grazed for a brief period each day on the winter growth of lucerne. At the end of the winter, the fields should be worked with a springtooth cultivator fitted with special lucerne points, to break up any crust formed on the surface soil; a top-dressing 2 cwt. of superphosphate per acre should also be applied at this period."—From Agricultural Gazette, November, 1927. If normal spring and summer rains may be expected and you have fairly well prepared, clean land, there should be no difficulty in getting a good strike of lucerne in the spring. Lucerne sown in the spring will ordinarily be sufficiently established by the following winter to yield tremendous quantities of rich, nourishing green fodder, which will undoubtedly help you maintain the herd in full milk.



Dept. of Agric. Photo.

LUCERNE ON THE INLAND FARM

The photographs above illustrate very vividly what has already been done in some districts, and can be done on tens of thousands of acres of similar country. On the left is shown typical river flats such as occur for many miles along the Lachlan, Murrumbidgee and tributary rivers, growing an almost impenetrable mass of cabbage (or variegated) thistle. These thistles are only valuable for stock food when in the matured ripened stage before they dry out and their vigorous growth swamps out all summer growing plants which should have become estab-

lished in the spring. Thus these flats carry comparatively little feed during the summer when it is most needed. On the right is shown the tremendous productive power of this class of land when laid down with lucerne. On most of the inland river flats water is obtainable at comparatively shallow depths, and the Lucerne plant, being naturally deep rooting, finds its way down to underground supplies of moisture after being established a few years, thus becoming practically drought proof.

**YATES' BROADLEAF
AY LUCERNE
GIANT-UPRIGHT**

**YATES' BROADLEAF
AY LUCERNE
GIANT-UPRIGHT**

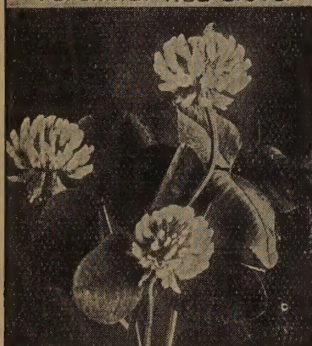
in sealed bags is re-machined and tested seed of extra prime quality of a superior type of N.S.W. grown Lucerne, which is saved on selected farms in those districts in which, owing to special natural conditions, there has been evolved a long standing drought resisting strain, which has proved itself for Australian conditions. Supplied in 25lbs. and 50lbs. net SEALED bags.

CLOVERS

FOUR USEFUL CLOVERS



Yates Superfine
Perennial Red Clover



Yates Superfine
White Clover



Trifolium Incarnatum
(Crimson Clover)



Benseem
(Egyptian Clover)

Landholders, especially those in areas where a fair rainfall is experienced, are realising more and more the great value of the Clovers, as **Soil-renovators**, as well as fodder crops of the highest quality, either alone, in pasture, or sown with other green stuff or hay crops. They also help to provide the other plants with available nitrogen, thus stimulating the general growth.

For renovating worn-out land, and for keeping valuable farming land in proper condition, nothing will do more good than the Clover family (or, if preferred, other Legumes, such as Field Peas, Field Lupins and Soy Beans, and in warm climates Cow Peas). When ploughed in they add a most valuable manure in the form of nitrogen, which is gathered from the atmosphere. When the crop is ploughed in the nitrogen is made available, while the foliage, stems and roots, form necessary "humus," which gives "life" to the land. For the efficient growth of all legumes an ample supply of phosphates is essential. Soils deficient in this element should be treated with "super." or other phosphatic manure.

The addition of one or other of the Clovers, when laying down pastures or sowing greenstuff or hay crops, will provide a much **better balanced ration** of which stock are very fond; and when the crop is done the Clover will often give a good picking for a considerable period, afterwards being ploughed in for **green manure**.

Clovers succeed best in good "sweet" land and usually respond well to super-phosphate. Sow 12 lbs. to 15 lbs. per acre alone, or, if with pasture grasses, 2 lbs. to 3 lbs. per acre.

Generally speaking, Clovers should be sown in the autumn, but in good seasons successful results can be obtained from spring sowing in coastal and tableland districts.

YATES' A.Y. SUPERFINE WHITE CLOVER (Trifolium Repens)

This is used perhaps more than any other for sowing down with Pasture Grasses. It spreads quickly, especially in moist situations. Widely used on the North Coast of N.S.W. in Paspalum and Rhodes Grass Pastures, giving a splendid pick during the winter when these two grasses are more or less dormant. Succeeds in a wide variety of soils and climates.

Though in dry years it will thin out and perhaps almost disappear, the first good spring will bring an enormous growth, as the seeds remain in the ground until the necessary moisture occurs for its germination. We do not recommend this clover for the comparatively drier parts of the State, but it is undoubtedly one of the hardiest clovers and will persist under quite hard conditions.

YATES' SUPERFINE PERENNIAL RED CLOVER OR COW GRASS (Trifolium Pratense Perenne)

Increased interest is now being taken in this Clover as it is now found that it will do well in almost any district of good rainfall. It is a vigorous grower and is splendid for milk production. When sown with oats which are used for grazing it comes away strongly in the spring and keeps up the flow of milk as the oats gradually ripen off. It is not as perennial as White Clover, but will make an excellent pasture for two or three years, and for some time will give a much larger yield than White Clover; especially is this so in the colder districts where it is giving excellent results. It is recommended that this clover be used for practically all pasture mixtures for coast and tableland conditions. From one to two pounds per acre should be included in grass mixtures. When sown with oats use two to three pounds per acre. Planting alone use ten pounds per acre.

ALSYKE (Trifolium Hybridum)

Combines to some extent the qualities of the Red Clover and White Clover. It produces more forage than White Clover, but will not stand as much heat; but, however, is rather better on wet soils. It makes most of its growth during the winter and spring and stands frost better than any other.

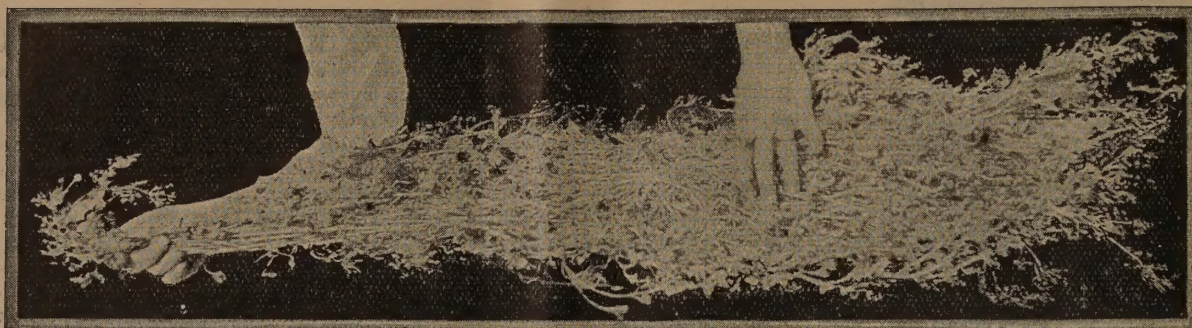
STRAWBERRY CLOVER (Trifolium Fragiferum)

An excellent variety for low, wet, swampy land subject to floods or inundations through the backing up of tide water. This plant has a trailing habit, and thrives where no other Clovers and very few Grasses will grow; in our opinion, it should be associated with Water Couch. If one pound or so per acre is sown in suitable situations it will very soon spread. It is very largely grown in portions of Gippsland, where the land is swampy, and is found to be very fattening. Cattle do particularly well on it.

CLUSTER CLOVER (Trifolium Glomeratum)

An annual very much like Burr Clover and thrives in the same conditions and soils. While it hardly gives as much feed as the latter, it has no injurious burr and therefore is excellent for sheep country. It is easily introduced by scattering seed over the land when it is not too hard.

Subterranean Clover (Trifolium subterraneum)



A 5FT. GROWTH OF SUBTERRANEAN CLOVER AFTER A WARM, MOIST SPRING.

An annual Clover which makes its growth in the cooler weather starting off with the first autumn rains, and has a dense spreading habit and is very free seeding. A proportion of the seeds are deposited under the soil, hence the name Subterranean. The seeds are contained in a soft case which does not hang in the wool, and, being large, are readily licked up by the stock in the dry weather when the ground is bare just as they do the seed of the ordinary Burr Trefoil.

The plant can readily be identified by its bluish green hairy appearance and most of the leaves have a brown blotch at the base.

Subterranean Clover seems to be very adaptable to all classes of soil and a wide range of climates. It will do in most districts where Burr Trefoil makes a growth every year, but it does not seem to stand quite as much heat.

It is particularly adaptable where a good autumn rainfall is assured, as it then starts early in the autumn and continues right through the winter to the late spring. It makes its maximum growth in the early spring when it forms a dense carpet over the ground, which dries off and cures as a natural hay, giving excellent feed. The hay contains a high proportion of seeds, so is highly nutritious. Owing to its free seeding habit, Subterranean Clover spreads rapidly and in suitable districts soon becomes one of the main features of the pasture. It can be easily controlled, however, in arable land by cultivation, and, being a legume, it naturally enriches the soil.

As both Subterranean Clover and Wimmera Rye Grass are free seeding annuals, they are the easiest and probably the most satisfactory combination for the sowing of broad acres at the present time. If they are planted after the first autumn rains and fed off only lightly the first year, special care being given them at seeding time, a much improved permanent pasture should be assured in all districts with a good autumn and spring rainfall.

The feeding value of Subterranean Clover seems to be very high, and all classes of stock do exceptionally well on

it and, owing to its rapid growth it greatly increases the carrying capacity of the land.

Owing to the way it grows in a dense mass it is excellent for sowing in land covered with undesirable weeds or top growth, as it spreads rapidly and tends to choke them out.

In New Zealand it has been found to compete well with Paspalum with which it seems an excellent combination, as it grows when the Paspalum is dormant and moreover tends to stop the latter from becoming sodbound.

On properly prepared land Subterranean Clover should be sown at the rate of 2-3 lbs. per acre, thus giving a good growth immediately; however, it can be cheaply introduced on grass land by scattering about 1 lb. per acre and then, if possible, scratching the surface soil with a harrow. When this is done it cannot be expected to give practical results for two or three years until it has become firmly established. In large pasture areas it is an excellent thing to carry a small quantity of this clover on inspection trips and to scatter a little seed in all the spots where the soil is inclined to be a little loose such as old stump holes and rabbit warrens or creek washes.

Most of the country in Australia which enjoys a regular winter rainfall is deficient in Superphosphate. Subterranean clover is particularly partial to this manure and wherever possible it should be spread over the clover—it helps it to start early in the autumn and increases the growth of feed right through the growing period.

In general, it can be taken that Subterranean clover can be planted in all districts south of the main Western line of New South Wales and in those districts north of this where good autumn and spring growth is made. It has practically no disadvantages, with the possible exception, that, being such a strong grower, it may tend to choke out other grasses and thus make the pasture unbalanced. It is an excellent practice to sow it on the poorer hills where it grows quickly and helps to protect the land from washing.



ILLUSTRATING HOW SUBTERRANEAN CLOVER RESPONDS TO PHOSPHATIC MANURE. FOREGROUND, NO MANURE; BACKGROUND, 1CWT. "SUPER" PER ACRE.

Dept. of Agric. Photo.

CLOVERS (Continued)



THIS PHOTOGRAPH AMPLY DEMONSTRATES THE VALUE OF INTRODUCING CLOVER INTO OUR NATURAL PASTURES.

TRIFOLIUM CERNUUM (Drooping Flowered or Gingin Clover).—This is an annual clover which seeds itself down like Subterranean clover, so that once introduced it is permanent. It is an excellent clover, making heavy growth in the autumn and winter months, and is particularly suitable for moist or even wet soils. It will withstand a large amount of inundation during the winter months. In drier soils it is not so successful as Subterranean clover, but it makes an excellent complement to that variety as it does much better in the damper soils where Subterranean Clover fails. Makes excellent hay, which should be cut when the plant is in flower, as the ratio of fibre increases as the seeds develop. It has no burr which would damage wool and is therefore no detriment to sheep. Is particularly partial to Superphosphate. Owing to its free seeding habit in suitable districts it spreads very rapidly, therefore it should be a good clover to scatter in moist, cold, uncleared land where an increase in fodder is wanted. Due to the difficulty of harvesting and to small supplies the seed is expensive, but sowing at the rate of about 1 lb. to the acre should be amply sufficient to introduce in suitable localities.

ENGLISH TREFOIL (*Medicago Lupulina*)

A perennial which does best in cold districts and deep soils. It is recommended for these localities when other clovers will not thrive. It provides good bottom herbage through the winter and lasts well in pastures.

BURR or "NATIVE" TREFOIL (*Medicago Denticulata*)

This is an introduced member of the Clover family, but has become so widespread that it has earned the title of "Native." It is now one of the commonest plants in N.S.W., and furnishes a tremendous amount of feed. It grows with the first good autumn rains, giving a heavy

yield of lush green fodder throughout the winter and spring. With the approach of summer the plant ripens off and the seed, falling on the ground, then forms a most valuable and highly concentrated food. This the sheep will lick up from the ground and thrive on. Country that grows this Trefoil is essentially fattening country. The burrs, however, are a great disadvantage in purely wool growing country.

BURRLESS or BUTTON TREFOIL (*Medicago Orbicularis*)

This is a variety of Trefoil Clover which has attracted attention in Tamworth and other Northern districts. It is very similar in its growth and appearance to our Native Trefoil or Burr Clover, but the seed is not enclosed in a burr; this is manifestly a great advantage to wool growers. However, the plant is not as hardy or as prolific as the well-known Burr Clover. It is an annual, but seeds itself so profusely that it comes up every spring, and is permanent when once introduced.

LOTUS (Varieties)

LOTUS CORNICULATUS (Birdsfoot Trefoil)—A perennial which will probably do well in coastal and tableland districts. It is said to withstand dry weather better than Red Clover and needs less lime in the soil. It is used both in pastures and as a fodder crop.

LOTUS MAJOR (Greater Birdsfoot Trefoil)—A perennial like the above, but appears to do best in damp soils. Seed should be sown in early spring and lightly covered with a chain or brush harrow.

LOTUS ANGUSTISSIMUS (Narrow-leaved Lotus). A hardy clover which does well in rough country and should be very suitable for sowing on burns. In trials at Glen Innes it proved very good, giving fine summer feed.

CLOVERS (Continued)

Three Vigorous Annual Varieties for Fodder or Hay

TRIFOLIUM INCARNATUM

(or Crimson Clover)

This is an annual, a quick grower, and useful as a rotation crop or for hay. It is not of much use for grazing, but it is usually considered that it does not produce as much feed as rape which has largely replaced it. The root system is particularly efficient in producing nitrogen bacteria and therefore it should be useful in certain conditions as a soil improver in orchards. As stock do not eat it readily, owing to its hairiness, it is mostly used as a rotation crop in cattle and dairying districts.

BERSEEM (or Egyptian Clover)

(*Trifolium Alexandrinum*)

An annual Clover suited to the more temperate districts, which **must be sown in early autumn**, as it makes its growth during the autumn, winter and early spring months. Sown in early autumn in a favourable locality, it will give two and even three cuttings of valuable Lucerne-like greenstuff during the winter and early spring. It can also be sown in the autumn with oats, and after being grazed for a time it can be cut in the spring with the oats for hay. It should be tried in all temperate districts where Lucerne does not do well.

BOKHARA CLOVER (*Melilotus Alba*)

(or White Sweet Clover)

A biennial extremely useful for renovating, green manuring, and preparing land for the introduction of lucerne. The plant makes very big root growth, and when it dies out after the second year it rots down very quickly, leaving the soil well opened up.

Bokhara can be grazed profitably by all classes of stock, the fodder value, by analysis, being extremely high. There is practically no danger of bloat with this Clover, but it is likely to taint milk. It is also an excellent honey plant.

If used as a rotation crop it can be ploughed in either the first or second year according to circumstances. Seeding does not take place until the second year, and so long as this is prevented there is no danger of the plant getting out of control.

This plant should not be grown in wheat paddocks, as the seed will taint flour. Sow 8 lbs. to 10 lbs. per acre broadcast, or 5 lbs. in drills.

SOWING RAPE

Yates' "A.Y." Broadleaf Dwarf Essex

Sowing Rape is one of the most profitable stock fodders for fattening. In addition, it is a very useful rotation crop and soil renovator on account of its vigorous deep rooting habit which penetrates subsoils to a considerable depth. It is one of the best annual fodder plants for sheep in Australia, and with the widespread recognition of the value of combining sheep and wheat, it is now becoming very important on the wheat farm, not only for sheep feed, but also as a rotation crop for renovating wheat land.

If paddocks, which are showing signs of exhaustion under wheat, are ploughed and a crop of Rape sown, say early in March, it will give a lot of feed during the winter and following spring. If, during the following summer, the remains of the crop and animal droppings are ploughed in, the land will be very much enriched, and when sown with wheat again, a greatly increased yield will result. The roots of the Rape tend to break up and enliven the soil just below plough depth and this greatly renovates the paddock. Rape is equally good for sheep, pigs or cattle, so long as it is not given in quantity to milking cows, as it is apt to taint the milk.

Sheep put on to Rape fatten very quickly; even old broken-mouthed ewes, that would starve on an ordinary pasture, very soon put on flesh, and are fit for the butcher. They should, however, be sent to market as soon as they are "topped off" as, if put back on the grass they very soon lose condition again. As a means of fattening lambs, especially weaners, for market, there is nothing to equal Rape.

Rape should be eaten off heavily and "spelled"; the plants then soon recover and give a second or third crop almost as good as the first; in fact, if sown in the early autumn it should give several months' feed.

Poultry farmers are finding a small patch of Rape a valuable asset, and for this purpose small successional

sowings should be made through the autumn and again in the spring.

Some growers prefer to sow it with Rye Corn, say half-bushel of Rye and two pounds of Rape; others sow it with mustard, using half-a-pound with four pounds of Rape per acre. The inclusion of Mustard corrects the occasional tendency of Rape to scourt.

We recommend sowing in February, March or April, after the good autumn rains, but as early as possible after the middle of February. It can also be sown with advantage in early spring, especially in the cooler districts, as it is extremely hardy. The land should be deeply ploughed and well worked, but if sown on stubble land, it would be enough on light soils to stir the surface thoroughly with a disc harrow. Sow three pounds per acre in drills, or four to six pounds broadcast. If drilled, so much the better, but the depth of the hoes must be adjusted so as not to sow too deeply. Where a machine is not available it may be sown broadcast by mixing with several times its bulk of dry soil, which will materially help to distribute the seed evenly; or it may be evenly distributed with a Seed Sower. We do not recommend that Rape should be sown on poor hungry land, as it will not succeed; it requires good soil and deep cultivation, and will well repay the labour expended in preparing the land thoroughly. Where manure is employed in growing Rape (and it is a crop which quickly responds to such attention) we would recommend one rich in ammonia—say blood manure or fine bonedust; superphosphate is also used with great success.

As there are several strains of Rape, some very much better and yielding larger crops than others, also, as many of the cheaper samples are tainted with wild mustard or yellow weed, we would strongly advise growers to buy our re-cleaned seed, and note that each bag is sealed and branded.

LEGUMINOUS CROPS For Autumn Planting

IN the agriculture of the world the Leguminaceae (Legume family) rank next in importance probably to the Gramineae (Grass family). For providing a fodder of the highest nutritive quality, for renovating worn out land and for keeping valuable farming land in proper condition, nothing is more useful than the various species of Legumes which are now in commercial use.

MARKET PEAS.

In the highland districts around Sydney and on the tablelands, many farmers now devote a portion of their holding to the growing of green peas for the Sydney market, and in recent years this has proved very profitable.

For varieties and descriptions, see Yates' Annual. Prices on application.

FIELD PEAS.

This crop is an excellent fodder for sheep, pigs and other stock, but we think its main value is when grown as a combined "legume-cereal crop," particularly with oats or wheat. If sown early with oats they can be grazed off once or twice during the winter and then let go dry for hay. The addition of this crop to the green feed and hay makes a much better balanced ration and it is very palatable to stock.

If sown alone they may be grown to maturity for "topping off" and when cut fed to pigs, or they may be cut green just after flowering, for cattle or pig feed. This crop is classed among the best of the soil improvers. Even if only the roots are ploughed in the soil is greatly enriched.

Field Peas, though not so hardy as Tares or Vetches, are earlier maturing, usually cheaper in price, and one grower reports that when grown with a cereal it will stand the trampling of grazing cattle better than will Tares under similar conditions. Field Peas can be sown in the autumn or spring, but in mild districts we prefer autumn sowing.

Sown alone $1\frac{1}{2}$ to 2 bushels per acre broadcast, or say 30 lbs. in drills 2 feet apart. Sown with cereal crop, try $\frac{3}{4}$ bushel Field Peas with $1\frac{1}{2}$ bushel oats or wheat per acre.

We usually stock the Grey, Blue, and Dun varieties of Field Pea, the Grey and the Dun being perhaps the most popular. In addition we now have supplies of the favourite Black-eyed Susan variety which is in great demand in N.S.W.

TARES or VETCHES

These are important members of the legume family and are largely grown both for fodder and as a winter green manure. In both cases it is preferable to sow in conjunction with a cereal crop, though they may be used alone as green manure. When used for feed the combination of legume and cereal gives a well balanced ration, and the upright growth of the cereal supports the Tare, which is a climbing or trailing plant. Cows milk well on Tares and it is excellent fattening crop for pigs.

In some of the North Coast districts this crop, either alone or in combination with Rye, Oats, or Barley, is sown on the maize flats, fed off during the winter, and in the spring the residue ploughed in for green manure. Not only does this provide excellent winter fodder but it also maintains the fertility of the flats, thus giving better yields in the succeeding crop. In order to encourage a quick and heavy growth, we advise the application of Superphosphate with this crop.

Tares succeed in a wide variety of soil and districts, so long as there is a good winter rainfall. Seed should be sown in early autumn from February onwards. We would suggest a sowing of from $\frac{1}{2}$ bus. to 1 bus. Tares with a bushel or half-bushel of Oats, Rye, or Barley (or a mixture of the three). The ratio will vary according as the main crop is intended to be the cereal or the legume. The Department of Agriculture recommend 30 lbs. Tares with a bushel of grain. The seed can be mixed and broadcasted or it can be drilled in. If sown alone, up to 2 bushels per acre is ample.



VICIA DASYCARPA

TWO NEW VETCHES.

We are pleased to introduce these for the first time this year. They have shown great promise in trials conducted by the Department of Agriculture. We suggest that trials of these be made to ascertain their value under customers' local conditions.

VICIA DASYCARPA (Woolly Podded Vetch).

Is a heavy yielding vetch which in trials in various districts showed distinct improvement over the ordinary *Vicia sativa*. It is quick growing and palatable. In favourable seasons it can be harvested in about five months. Both these varieties are of procumbent habit and thus help to choke out weed growth.

VICIA ATROPURPUREA (Purple Vetch).

Is also a high yielding variety having done very well in departmental trials at Yanco as well as in the coastal districts. It seems to give greater bulk of fodder than *V. dasycarpa*, and would seem to be suited to the north coast for green fodder purposes.

NEW ZEALAND BLUE LUPINS.

Annuals which for green manuring provide one of the best crops for ploughing in, especially in our cooler districts. When practicable we recommend autumn sowing, but they will succeed if sown in early spring. Lupins grow very rapidly and produce a large quantity of top. Sow at the rate of 2 bushels per acre. For small trials 3 lbs. will sow an area of 100 square yards (10 yds. x 10 yds).

KUDZU VINE (*Pueraria Thunbergiana*).

A perennial legume only adapted for poor soils near the sub-tropical coast. We can only supply in packets; but as the plants grow quickly and send out long runners which root at every joint, they can then be severed and transplanted over the required area. Packets 1/-.

HORSE or TICK BEANS.

A variety of Broad Bean, the seeds of which form excellent feed for horses, but their main usefulness is as a winter green-manuring crop, as they grow well on cold wet soils. Sow about 2 bushels per acre.

YATES' Re-machined SEED GRAIN

IT PAYS TO SOW YATES' RE-MACHINED SAMPLES

MANY farmers do not yet recognise the importance of procuring the primest and purest samples of grain when sowing for hay, grain or green fodder, and for the sake of a few pence per bushel thousands of bags of the most inferior seed oats are annually sent away to our dairy farmers to grow fodder. The infesting of land with weed seeds when, by paying a little extra price, seed which has been thoroughly re-dressed is obtainable, is surely a poor policy. See also illustration on opposite page.

The sowing of Re-cleaned Farm Seeds means **CLEANER CROPS, SUPER CROPS, HEAVIER CROPS** and what is perhaps of the most importance—**CLEAN LAND.**

SEED OATS

Prime Heavy Re-cleaned Samples.

The importance of sowing only re-cleaned and re-graded Seed Oats for green fodder as well as for grain is now beyond the experimental stage. The high cost of labour and high land values make it more than ever necessary to get the most out of the cultivated land. It is better to have ten acres of a really good crop than twice the area giving only an indifferent yield.

We have proved from varied farming experience that



Sunrise Oats grown from Yates' Re-machined and Tested Seed in a normal season.

the most profitable method of feeding dairy cows for eight months of the year is to plant **Algerian Oats** for grazing. To get the best results the cultivation land should be divided into three or four small paddocks; the crop which has been trodden down soon recovers after a few weeks' spell, but continual grazing is wasteful, not good for the crop or the cows. We recommend that a dressing of one cwt. of Bonedust or Superphosphate be used, also five or six pounds of Clover seed per acre be planted with the Oats. This

will give a more balanced ration and so increase the milk flow; it will also make the land increasingly fertile, and give a good stubble feeding during the following autumn.

The **Algerian** variety is of finer growth, stands up to trampling, and is of strong root growth, which prevents it from being easily pulled out. It stands the greatest amount of feeding off, but if the earlier varieties, such as **Sunrise**, **Mulga** or **Myall** are used, good green feed will be had much earlier. By making two sowings of these early varieties about two months apart, continuous grazing will be had from early autumn right into the late spring.

If shut up fairly early in the spring good hay crops can be gathered in addition to the winter grazing.

Yates Extra Prime AY Re-Machined Samples are the very pick of the lines offering, thoroughly re-cleaned and graded by our special machinery. Every grain should produce a strong, well-nourished plant under proper conditions.

LIST OF VARIETIES.

Algerian—See foregoing, the variety most used for all round purposes, stools well, is very hardy and a great drought resister.

Sunrise—An early oat of medium coarse straw, very suitable for coastal districts; moderate stooler. It should be sown more thickly than **Algerian**. An excellent oat for silage or green fodder, giving a great bulk of feed; it is not so good for hay as **Mulga**, as the stems are not so fine. Stands feeding off well and is much less liable to rust than **Algerian**.

Mulga—A very early maturing selection from **Sunrise**, and better for grazing and fodder in the warmer inland districts. It also does well on the coast and tablelands. It is particularly palatable to stock, is excellent for grazing, as it stands feeding off well; can be sown either early or late. In the former case a lighter sowing is made. It is an excellent oat for grain and produces a fine plump sample in warm districts where **Algerian** will not do well. For grain purposes it is somewhat weak in the straw, so that it should be sown late, when it does not grow too rank and the straw will be found quite strong enough, or, if planted early, is kept well fed off in the early part of the season.

Myall—A sister oat to **Mulga**, which it resembles in practically every respect. It is useful for the same purposes as **Mulga**, but it stools slightly better and appears to do rather better than **Mulga** in the cooler districts.

Guyra—A very early dual purpose oat with medium fine purplish straw. Is excellent for chaff, and the produce weighs well in the bag; it seems specially suitable for cooler districts where it gives a fine yield of plump short dark brown grains. It is about as susceptible as **Algerian** to rust, it stands feeding off well and is much liked for green fodder on the south coast of New South Wales, and should do well on the tableland districts.

Warrigal—Selected from **Sunrise** in 1921. This Oat is essentially a grain sort, the seed being large, white and remarkably plump. Recommended as a white feed Oat.

Lachlan—A fairly recent variety which has proved excellent for grain in the warm inland districts.

Ruakura—An early variety that has been practically superseded by the newer early sorts.

Tartarian (Side Bearing)—Late. One of the earliest white grained varieties, and good for green fodder, especially on the cold highlands.

Dun—Late. Produces hay and grain of fine quality, largely used for feed by race-horse trainers.

Heavy Black—For green feed in cold climates.

Heavy White—A green fodder Oat for moist cool climates.

RYE CORN

Rye Corn is very hardy and is largely used for winter feed, especially where the climate is severe, as it grows better in severe weather than any other cereal. It is excellent for feeding; many experienced farmers preferring

YATES' Re-machined SEED GRAIN



TOP—PRIME, HEAVILY GRADED, YATES' RE-MACHINED AND TESTED SEED. BOTTOM—WEAK, SHRIVELLED AND BROKEN GRAINS AND WEED SEEDS, WHICH HAVE ALL BEEN REMOVED. SEE ALSO INTRODUCTION AT TOP OF OPPOSITE PAGE.

to use it this way, as they find their stock do best while the Rye Corn is young.

It will stand grazing all the winter, and rapidly grows again after being eaten down. It is also used for mixing with Tares, the Rye Corn serving to hold the Tares off the ground. Rye Corn comes into use very early. It is also sown to advantage mixed with Rape. The straw is very valuable for thatching, and some farmers sow the headlands of their hay paddocks with Rye Corn for thatching the stacks. Sow about two bushels to the acre.

Black Winter Rye—The best sort for early winter feed, strongly recommended.

Mammoth White—The most largely used variety excellent for grazing off and the best sort for collar making.

Emerald—A good all-round variety.

SEED WHEATS

Prime, Heavily Re-cleaned Samples.

Grown from Select Stocks.

Wheat is largely used for green fodder and for hay as well as being the world's most important grain crop. It stands dry conditions better than almost any other grain and is therefore of great value for fodder and for hay, as well as for grain in districts of low rainfall. It will often give good crops in seasons when oats are a failure. The only varieties we stock in quantity are those most used for green feed and hay, but occasionally we have supplies of the newer grain varieties. The advantages of sowing only whole plump grain free of pinched broken seeds, weed seeds and foreign matter, is now proved to be worth many, many times the slight extra cost per acre for Re-cleaned Seed; in unfavourable seasons it may mean the difference between a crop and a failure.

Sow up to 2 bushels per acre together with a dressing of 56 lbs. to 112 lbs. superphosphate per acre, according to location and quality of the land.

LIST OF VARIETIES.

Florence (Very Early)—Stools fairly well, growth vigorous and compact, suitable for hay or grain, but especially valuable for green feeding, grazing and soiling in our coastal districts.

Thew (Early)—Medium, tall, good stooling sort. Recommended for hay and for green fodder in the coastal districts, where it has proved one of the best.

Canberra (Early)—A very productive grain wheat and one of the best for late sowing in hot dry districts. Rather slender straw.

Waratah (Early)—One of the newer wheats which is coming into great prominence as a high yielding grain variety. In the various wheat growing competitions throughout N.S.W., it has been consistently among the leaders.

Hard Federation (Mid-Season)—A favourite variety in the Central Tablelands, Slopes and Northern districts for grain production. Hard grain, stands feeding off. A very good all round wheat.

Soft Federation (Mid-Season)—Although rather susceptible to rust and to bleaching, this is a very popular mid-season wheat. It is a high yielding grain variety and very drought resistant.

Marshall's No. 3 (Late Mid-Season)—A variety as valuable for hay as it is for grain. It is a good stooler and should be sown very early. Does well throughout the wheat belt.

Yandilla King (Late)—Another sort which can be grown for both hay and grain and does well in any part of the main wheat belt. Stools well.

BARLEYS

Barley is the earliest of the grain crops to mature and in this earliness lies also its great value as a green fodder crop. It is one of the sweetest fodders grown and is relished by all classes of stock.

White Skinless.—The earliest variety and very valuable for its quick growth. It affords two cuttings and should be grazed after each; the close feeding seems to cause it to come away with renewed vigor.

Trabut.—A five row bearded barley, very similar to Cape, hardly stools as much, but is slightly earlier; is excellent for early green feed.

Cape.—This is the variety most generally used for green fodder. It grows quickly, stools very well, and gives large bulk of feed; a five row bearded type.

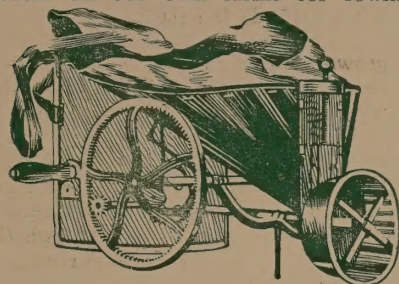
Pryor.—A two row bearded Barley, rather like English, stools well and is rather finer in the straw than Tra-but or Cape.

English or **Malting Barley**, two rowed and bearded, is mostly used for grain for malting purposes, but can also be used for green feed.

Write for Current Price List (and samples if required) stating quantity wanted.

THE "CAHOON" SEED SOWER

For sowing broadcast Lucerne, Clovers, Sudan Grass, Millets, Pasture Grasses, etc., and small areas of Seed Grain, these machines are excellent. We use them on our own farms for sowing Lucerne, Clovers, etc., and we find them of considerable value. A strong well-made machine capable of giving long and satisfactory service.



Price, 28/-. Postage, N.S.W., 3/-. Other States, 5/8.

HOW TO OPERATE THE "CAHOON."

Test with your normal step turning the crank once for each step; note how far the seed is thrown each side of you and step in from the edge of the area you are sowing sufficient distance so that the throw on that side will just seed to the edge of the land. Step twice this distance on the other side and mark with a peg, then proceed down the line you first determined and return down the line denoted by the peg. This will give an even sowing. Then keep stepping twice the width of one side throw for determining each new line of travel, moving the pegs for guidance until the area is completed. To gauge quantities per acre needs a little care, but if you examine the sown ground for thickness and thinness of seeding, you will soon be able to adjust correctly.

Planet Jr. Implements

FOR THE FARM, ORCHARD AND LARGE GARDEN

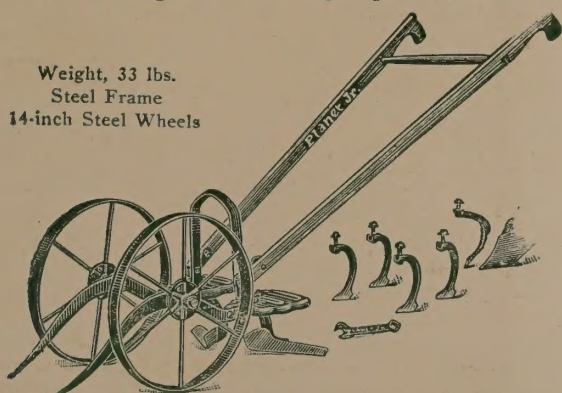
The intelligent use of these wonderful labor-saving implements is a big factor in the successful working of market gardens, orchards, etc. Provided reliable seeds only are sown, regular and accurate planting, followed by consistent cultivation, will do more than anything else to ensure big returns. We therefore offer these machines with every confidence. They are the strongest and most useful on the market, and have an excellent reputation for design and durability.

No. 16—SINGLE WHEEL HOE, CULTIVATOR, RAKE AND PLOUGH.

While Single Wheel Hoes do not accomplish as wide a range of work as the Double Wheel Hoes, they are lighter, and for steady all-day work in the market garden, many growers prefer them. This machine can be used to hoe both sides of the row at once while the plants are small (special axle bolt and ferrules needed and furnished as extras). The equipment includes one pair of 6 in. hoes, three cultivator teeth, one large plough, one 7 in. rake, one 4 in. rake and leaf guard. Price, 47/6. Freight extra. Weight, packed, about 30 lbs.

No. 17

Identical with No. 16 except that the equipment does not include the two rakes. Price, 40/-. Freight extra. Weight, packed, about 27 lbs.



Weight, 33 lbs.
Steel Frame
14-inch Steel Wheels

No. 11 COMBINED DOUBLE AND SINGLE WHEEL HOE.

The most completely equipped Wheel Hoe we offer. The height of the machine is adjustable for different work, and can be made to straddle rows 20 ins. high; and the various attachments are easily put on or removed. As the illustration shows, the attachments include—One pair of large hoes, one pair of small hoes, four cultivator teeth, one pair ploughs, one pair three-tooth rakes, one pair five-tooth rakes, two leaf lifters.

Price, 70/-. Freight extra. Weight, packed, about 40 lbs.

No. 12.

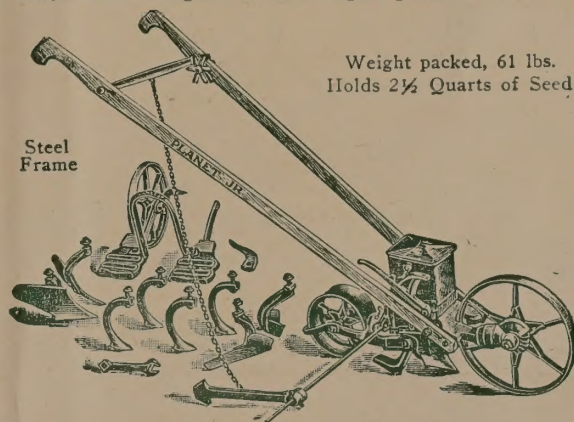
Identical with No. 11 except that the smaller set of hoes and rakes are not included.

Price, 55/-. Freight extra. Weight, packed, about 36 lbs.

No. 13.

Identical with No. 11, except that the equipment is limited to one pair of large hoes.

Price, 42/6. Freight extra. Weight, packed, about 30 lbs.



Weight packed, 61 lbs.
Holds 2½ Quarts of Seed

No. 25—COMBINED HILL AND DRILL SEEDER, DOUBLE AND SINGLE WHEEL HOE, CULTIVATOR AND PLOUGH

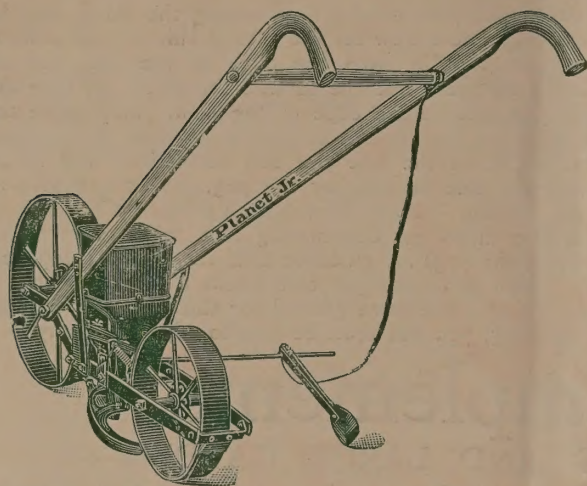
An excellent hand machine for either garden or farm. It will sow almost all varieties of seeds, and is one of the most useful tools one can have. The equipment includes:—One pair 6 in. hoes, four cultivator teeth, one pair ploughs, two leaf guards and a marker. The hopper holds 2½ quarts.

Price, £5/7/6. Freight extra. Weight, packed, about 61 lbs.

No. 4.

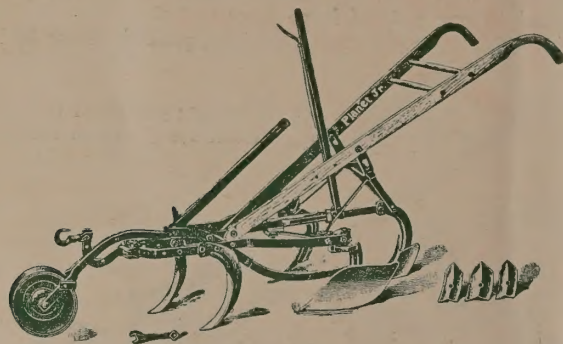
Very similar to No. 25 except that it has one less cultivator tooth, only one plough, and one leaf guard. Price, £4/10/-. Freight Extra. Weight, packed, about 50 lbs.

PLANET JR. IMPLEMENTS—(Continued)



No. 26—DRILL SEEDER.

This is essentially a seed sower for all types and conditions of soil. It incorporates a new system of dropping the seed, and the hopper which holds 4 quarts, is quickly removed, which facilitates emptying out surplus seed. The extra substantial wide tread wheels, front and rear, are not only easier running but cover the seed more evenly. Another good feature is that the seed shut-off operates independently of the index setting and cannot disturb it. Price, £5. Freight extra. Weight, packed, about 60 lbs.



No. 8—HORSE HOE AND CULTIVATOR.

This horse machine is a general favorite, being complete and easily operated; it is extremely sturdy, well-braced and adaptable to any conditions. The equipment consists of:—Four 3 x 8 in. cultivator steels, one 4 x 8 in. cultivator steel, two 6 in. hillers, one 7 in. shovel and depth regulator.

Price, £5/2/6. Freight extra. Nett weight 83 lbs.

No. 7.

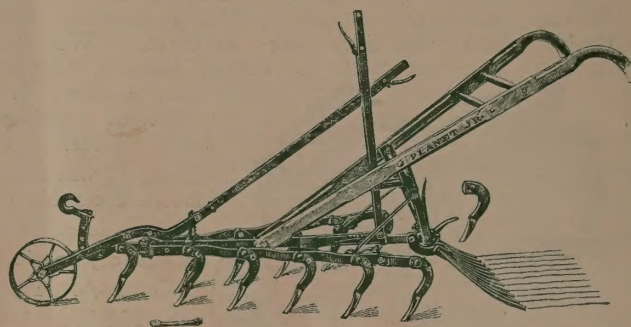
Identical with No. 8, with the exception of the depth regulator which is not included.

Price, £4/17/6. Freight extra. Nett weight 77 lbs.

No. 9.

Identical with No. 8, except that the wheel is not adjustable by lever and it is not fitted with depth regulator.

Price, £3/17/6. Freight extra. Nett weight 71 lbs.



No. 90—TWELVE TOOTH HARROW, CULTIVATOR AND PULVERISER.

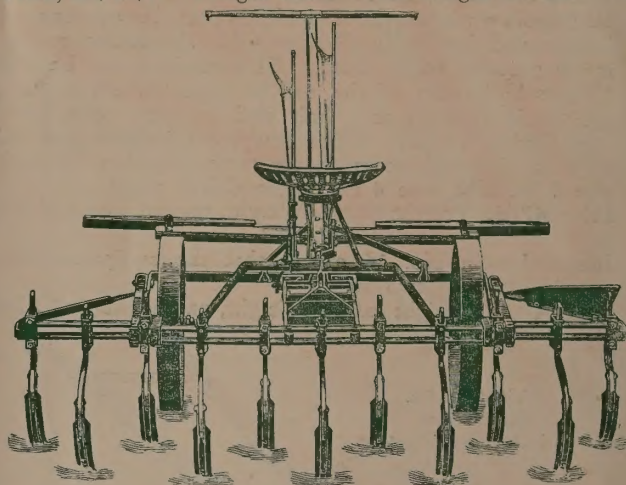
An extremely useful combination tool which leaves as fine surface marks as if it had been raked by hand. There is an extra tooth to take the place of the pulveriser if it is not required. The chisel-shaped teeth are 1½ ins. wide and the angle at which they traverse the ground is adjustable. The depth and width of cut are instantly adjustable by hand levers; the latter may be set anywhere between 15 inches and 3 feet.

Price, £5/7/6. Freight extra. Nett weight 74 lbs.

No. 90B.

Similar to No. 90, but without the pulveriser.

Price, £4/15/-. Freight extra. Nett weight 66 lbs.



No. 41—ORCHARD AND UNIVERSAL CULTIVATOR.

This machine has two wheels of which the track is adjustable from 30-40 ins. There are seven steel cultivator teeth running behind the wheels with two extra teeth on both sides on extension bars, making a total of eleven teeth. Complete with the extension, the machine cuts 6 ft. 6 ins., and can be adjusted anywhere down to a 4 ft. cut. There is a side hitch for two horses with the tongue set 15 ins. to the left of centre, thus allowing for working under low branches of orchard trees.

Price, £25. Freight extra. Weight, packed, 474 lbs.

With three-horse hitch, £27/10/-.

Without extension bars, £22.

ARTHUR YATES & CO. LTD.

184-186 SUSSEX STREET, SYDNEY

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